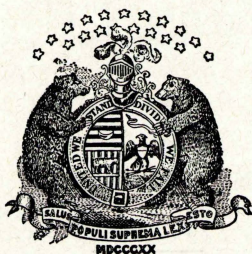


# MISSOURI STATE BOARD OF HEALTH

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## QUARTERLY BULLETIN.

NEW SERIES.

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VOL. 2.

JANUARY-MARCH, 1912

NO. 1.

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## **ANNOUNCEMENT.**

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The State Board of Health wishes to call the attention of the citizens of the State to the service offered by its Bacteriological Laboratory. Although this department is intended chiefly to assist the physicians, it is equally at the command of any citizen. In this connection it is especially desirous in serving schools throughout the State in matters pertaining to Public Health, wherein examination of a bacteriological nature would be useful.

The examination of drinking water for evidence of sewage contamination, of sputum for tubercle bacilli, and of the heads of animals for evidence of rabies are important examples of the kind of work that the laboratory offers to do. There are no fees for any of the examinations made.

Inquiry regarding sending of specimens, and communications with respect to any particular investigation may be addressed to the State Bacteriologist.



# BULLETIN

OF THE

## Missouri State Board of Health

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### **DIVISION OF STATE INTO HEALTH DISTRICTS.**

For the purpose of effecting a more complete correlation in the operations of the State, county and municipal health officers, the State Board of Health has outlined a plan of districting the State into seven districts, to be known as "Health Districts," and the organizing of the districts into compact working bodies.

The arrangement of these districts is given below.

The policy of grouping contiguous territory has been observed, at least this plan has been followed to the fullest extent advisable, with due consideration given to means of communication, railroad and otherwise. This is essential in serving the convenience of those attending the district meetings and in the frequent joint duties which health officers are called upon to perform.

While it is true that the units of jurisdiction of health officers is defined by statute as state, county, city, town and village, yet the health and sanitary conditions of these units can only be best administered and the entire citizenship of the State fully served through the joint action of health officials and others interested.

The possibility continually exists of a communicable disease having its origin in a municipality, extending beyond the boundaries of such an incorporation and becoming a county problem and even



extending beyond the boundary of such county into one adjoining, or the reverse may be true; a contagious disease may have its beginning in the area of a county outside of municipalities, which extends over the border of incorporation lines involving cities or towns.

The purpose of these district meetings is not only to effect organization, but a program consisting of addresses and papers on public health questions will be prepared for each of these conferences. Upon the program of the various meetings will appear the names of men prominently identified with the public health work of the State and of men residents of the respective districts, who are prominent and active in such districts.

The places for the convening of the various district meetings have been decided upon and are named below. The dates of meeting, however, have not been fixed, with the exception of the date for the holding of the first meeting which is to be in St. Louis, June 26, 1912.

From the office of the State Board of Health letters and programs will be addressed to the various county and municipal health officers.

The public health laws of Missouri are comparatively primitive and are not such as to fully meet the demands of public health, yet by the injection of a little more system and method in their administration, results a hundredfold more may be accomplished than is now being done.

**District No. 1.**—Place of Meeting, St. Louis, June 26, 1912.

COUNTIES.

Crawford,	Lincoln,	Ste. Genevieve,
Dent,	Montgomery,	St. Louis,
Franklin,	Phelps,	Warren,
Iron,	St. Charles,	Washington:
Jefferson,	St. Francois,	

**District No. 2.**—Place of Meeting, Hannibal.

COUNTIES.

Adair,	Marion,	Randolph,
Clark,	Monroe,	Schuyler,
Knox,	Pike,	Scotland,
Lewis,	Ralls,	Shelby.
Macon,		



**District No. 3.**—Place of Meeting, Jefferson City.

## COUNTIES.

Audrain,	Cole,	Miller,
Benton,	Cooper,	Moniteau,
Boone,	Gasconade,	Morgan,
Callaway,	Howard,	Osage,
Camden,	Maries,	Pettis.

**District No. 4.**—Place of Meeting, Cape Girardeau.

## COUNTIES.

Bollinger,	Madison,	Ripley,
Butler,	Mississippi,	Reynolds,
Cape Girardeau,	New Madrid,	Scott,
Carter,	Pemiscot,	Stoddard,
Dunklin,	Perry,	Wayne.

**District No. 5.**—Place of Meeting, Chillicothe.

## COUNTIES.

Caldwell,	Gentry,	Mercer,
Carroll,	Grundy,	Nodaway,
Chariton,	Harrison,	Putnam,
Daviess,	Linn,	Sullivan,
DeKalb,	Livingston,	Worth.

**District No. 6.**—Place of Meeting, Kansas City.

## COUNTIES.

Andrew,	Clinton,	Lafayette,
Atchison,	Holt,	Platte,
Bates,	Henry,	Ray,
Buchanan,	Jackson,	Saline,
Cass,	Johnson,	Vernon.
Clay,		



**District No. 7.—Place of Meeting, Springfield.****COUNTIES.**

Barry,	Howell,	Pulaski,
Barton,	Jasper,	Shannon,
Cedar,	Laclede,	St. Clair,
Christian,	Lawrence,	Stone,
Dade,	McDonald,	Taney,
Dallas,	Newton,	Texas,
Douglas,	Oregon,	Webster,
Greene,	Ozark,	Wright.
Hickory,	Polk,	

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**RESOLUTIONS AFFECTING RAILWAY STATIONS AND TRAINS,  
ADOPTED BY THE MISSOURI STATE BOARD OF HEALTH,  
JANUARY 15, 1912.**

Whereas, It has been conclusively demonstrated and is a matter of scientific, as well as general knowledge, that the use of what is usually known as the common drinking cup, the roller towel and the public comb and brush are dangerous and a menace to the public health, in that through these means communication of infectious diseases results.

Therefore be it ruled by the Missouri State Board of Health, that the use of any common drinking cup or other utensil ordinarily used for public drinking purposes in railway stations and trains is prohibited.

It is further ruled that the use of the roller towel in railway stations and trains is prohibited.

It is further ruled that the use of the public comb and brush in railway stations and trains is prohibited.

It is further ruled that no person, or corporation, in charge of or control of any railway train or railway station shall permit the use of the common drinking cup or other utensil used for that purpose, or the roller towel, or the public comb and brush. Such drinking cup or other utensil used for drinking purposes, or roller towel, or comb and brush, shall not be placed in railway stations or coaches; neither shall the same be furnished to the public for common use by persons



in control of trains or railway stations, or by employes in stations or trains, which employes are serving railroad corporations.

The Missouri State Board of Health recommends that railway officials, or those in charge of railway stations and trains, conveniently provide for the public, individual utensils for drinking purposes, which may be purchased at the price of one cent each, such utensils to be placed in either railway stations or trains, or both.

Be it further resolved that the above requirements shall become effective March 1, 1912.

### THE BACTERIOLOGICAL LABORATORY.

Tabular view of the work for the first quarter of the year 1912:

	Tuberculosis...	Typhoid.....	Diphtheria.....	Malaria.....	Rabies.....	Gonorrhoea....	Water.....	Tissues.....	Urine.....	Miscellaneous..	Totals.....
January.....	130	13	45	4	.....	12	4	8	54	22	292
February.....	143	25	20	4	5	16	7	10	58	21	309
March.....	160	18	27	3	1	14	5	13	70	16	327
Totals.....	433	56	92	11	6	62	16	31	182	59	.....
Grand total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	928

The total number of examinations for the first quarter of the year 1911 was 323.

The total number of examinations for the first quarter of the year 1912 was 928.

The per cent of increase for the first quarter of the year 1912 over the first quarter of the year 1911 is 187 per cent.

### NOTICE CONCERNING EXAMINATION OF URINE, TISSUES, STOMACH CONTENTS AND FECES.

The increasing number of examinations has made it necessary to limit the service of the laboratory more especially to the bacteriological work. For this reason the examination of urine, both chemical and microscopical, and the examination of tissues, stomach contents and feces will be discontinued after June 1st.



This does not apply to the examination of urine for tubercle bacilli in suspected cases of genito-urinary tuberculosis, nor to the examination of tissues or feces where the condition is possibly tuberculosis.

In sending urine to be examined for tubercle bacilli, the following points should be carefully noted:

1. The specimen should be obtained by catheter, and drawn directly into a sterile bottle.
2. It should be stated upon the request card accompanying the specimen that it was obtained by catheter.
3. Two or four ounces of urine should be sent, and no preservative should be used.

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### **SUMMARY SHOWING RATE OF DEATH BY THE TWENTY-FOUR IMPORTANT CAUSES AND LOCALITY.**

The State undertakes to protect life, liberty and property, and of these three, life is obviously the most important. While we have successfully guarded our liberties and wealth, we have fallen far short in performing the primary duty in protecting human life.

Many hundreds of thousands of lives are needlessly wasted in this country annually, and in this State during the year 1911 no less than 17,628 or about forty per cent of the 43,390 deaths were due to diseases which could have been avoided or at least postponed by the application of timely preventive measures.

As a State we spend hundreds of thousands of dollars annually in maintaining military and civil forces to protect life, liberty and property from the lawless, or from a possible foreign enemy. Money is appropriated to save wild animals from useless slaughter and domestic animals from disease. We prohibit food and drug adulteration and other dangerous practices in this line. All these functions of the State are well and good, but is it not a true necessary and important duty of the State to assist in prolonging the lives of its citizens who are threatened with preventable maladies of all kinds, whether contagious or not? It is not enough to tell the average man how to avoid danger. He should, if possible, be told when he is in danger and given a chance to save his life.

Free schools are provided by the State to prepare the young for useful lives, but the science of disease prevention is, in a measure, concealed from them, and as a result they go forth in ignorance, one-



half to needless sickness and about forty per cent to a premature death, due to preventable diseases.

The following rates are based on the population of Missouri as shown by the census of 1910:

### **Typhoid Fever.**

Of the total 43,390 deaths reported to this office in 1911, 1,012 were due to typhoid fever, or equivalent to a death rate of 30.8 per 100,000, or 2.33 per cent of all deaths. The death rate of the State outside St. Louis and Kansas City was 2.81 per 100,000; Kansas City shows a death rate of 29 from this disease per 100,000. St. Louis city showed a death rate of 15.5 per 100,000 from this disease, or nearly 9-10 of one per cent of the deaths in St. Louis were caused by typhoid fever.

It is seen that the average death rate of the two large cities from typhoid fever is lower than the remainder of the State.

A few counties, as Dade, Dallas and Stone, showed as high as 7 per cent of the total number of deaths due to typhoid fever.

In Springfield there were 40 deaths from this disease, while there were 621 deaths from all causes, or, in other words, 6.44 per cent of all deaths were due to typhoid fever.

### **Measles.**

Measles caused 579 deaths during 1911, or 1.33 per cent of the total number of deaths. New Madrid county showed the highest per cent of deaths from measles, which was 7.08 per cent. It is very probable that many deaths assigned to other causes were due to measles. For example, many of the deaths attributed to pneumonia, especially broncho-pneumonia, are in reality due to measles, although they are not so compiled if measles is entered on the certificate either as a primary or contributory cause of death.

Since measles are followed many times by more serious diseases, effort should be made to check the prevalence of this disease.

### **Scarlet Fever.**

Scarlet fever resulted in 295 deaths in 1911, 180 of which were in St. Louis city. This makes a death rate of 8.09 per 100,000, which is less than death rate from this disease in the national registration area, as the average rate for the past ten years was 10.6 per 100,000.



The mortality from scarlet fever varies from year to year, and by special precautions before the time when this disease regularly appears, its spread may be restricted.

### **Whooping Cough.**

Whooping cough resulted in 467 deaths in 1911, or 1.07 per cent of the entire number of deaths. In other words, the death rate was 14.1 per 100,000 from this disease.

Dunklin county shows the highest death rate from whooping cough. There were 74 deaths from this disease during 1911, or 10.3 per cent of the deaths. A rate of 2.44 per 1,000 population.

It is very probable, as in the case of measles, many deaths from whooping cough were assigned to other causes, chiefly bronchopneumonia.

### **Diphtheria and Croup.**

There were 650 deaths credited to this disease during the year 1911, which makes this the most fatal epidemic disease of childhood, causing more deaths than either measles, scarlet fever or whooping cough.

The word "croup" is coupled with diphtheria in the international classification, yet only the single disease diphtheria is meant, and all fatal cases of "croup" should be reported as diphtheria.

The rate per 100,000 from diphtheria was 19.7 per cent, which is considerably lower than the rate for the national registration area, namely, 21.7 per cent for the year 1910.

### **Influenza.**

Influenza resulted in 623 deaths during the year 1911, or 1.43 per cent of the total number of deaths. The rate per 100,000 was 18.9 per cent.

More care should be exercised in using this term as a cause of death, and the following extract from an editorial in the Journal of the American Medical Association conveys our meaning:

"The present use of the word "influenza" seems to offer an instructive parallel to that of "malaria" a generation ago. A great many deaths from otherwise undefined causes of all kinds are now ascribed to influenza. Most of the respiratory affections of the winter and early spring are called influenza, or grip."



### **Tuberculosis. (All Forms.)**

There was a total of 5,035 deaths from tuberculosis in 1911, or 11.6 per cent of the total number of deaths, making a death rate per 100,000 of 152. This is not as high as the death rate from the entire registration area, which was 160.3 per 100,000 in 1910.

St. Louis county showed that tuberculosis caused 37.7 per cent of the total deaths in that county. This may be accounted for by the fact that there are a number of tuberculosis sanatoria located in this county.

Other counties showing a high percentage of deaths from this disease were: Howard, 16.7 per cent; Schuyler, 18.4 per cent and Taney with 19 per cent. Shannon county showed the lowest percentage, less than 1 per cent.

Of the cities, Webb City showed the highest percentage, which was 20.8 per cent. In St. Louis 12 per cent of the deaths and in Kansas City 10.4 per cent of the deaths were from tuberculosis.

### **Cancer.**

Cancer resulted in 1,911 deaths during last year, or a death rate of 58 per 100,000. The percentage of deaths from this disease was 4.4 per cent. St. Louis city shows 5.27 per cent of deaths due from cancer, a death rate of 82.8 per 100,000.

According to statistics furnished by the Bureau of the Census, there is a tendency toward increase from cancer, not only in this country, but in other countries. This may be due to greater care in diagnoses, and also to the increase in the proportion of persons at the more advanced age periods.

### **Epidemic Cerebrospinal Meningitis.**

As shown by statistics in this office there were 16 deaths from epidemic meningitis during 1911. There were doubtless more than this, but they were not properly classified by the attending physician, and a correct tabulation is not possible.

Epidemic or tubercular meningitis should be so stated, and when the meningitis is terminal or symptomatic, the disease in which it occurred should be stated.

There were 169 deaths from epidemic meningitis during the first three months of 1912, 102 of which occurred in Kansas City.

### **Pneumonia.**

From all forms of pneumonia there were 4,521 deaths reported during 1911, which is a death rate of 137 per 100,000. Death from



lobar, broncho and other forms of pneumonia were not separately compiled. It is noted that this disease affects elderly persons, and young children particularly.

In Kansas City the death rate per 100,000 from pneumonia was 167, while in St. Louis it was 172.

### **Diarrhoea and Enteritis.**

There were 2,083 deaths of children under two years of age from enteritis during 1911, and most of these occurred during the hot summer months. During June, July, August and September 1,341 deaths of children under two years of age occurred from enteritis. The rate per 100,000 population is 63.2, which is very low, compared with other states, some of which ran as high as 150 per 100,000 in 1910.

Pemiscot county showed the highest death rate from this disease, namely, 2.45 per thousand.

St. Louis showed a death rate of 89 per 100,000, while Kansas City shows a death rate of only 61 per 100,000 from this disease.

### **Organic Diseases of the Heart and Circulatory System.**

More deaths are caused from diseases under this head than any other, except tuberculosis. There were 4,919 deaths attributed to diseases of the heart and circulatory system during 1911, or 11.3 per cent of the total deaths. The death rate per 100,000 was 149. Doubtless the high rate is due to the fact that physicians state heart disease as a cause of death when there is doubt or a complication of diseases.

St. Louis city shows a death rate of 246 per 100,000 from diseases of the heart and circulatory system, which is an exceedingly high rate.

According to statistics issued by the Bureau of the Census there has been a large increase in the number of deaths from this disease.

Many deaths from "heart failure," which is classed under deaths from indefinite causes, are doubtless due to some disease of the heart and circulatory system.

### **Suicide.**

The number of deaths recorded from suicide during the year 1911 was 610, or a rate of 18 per 100,000. The most important methods used were firearms and poisoning, the former leading.

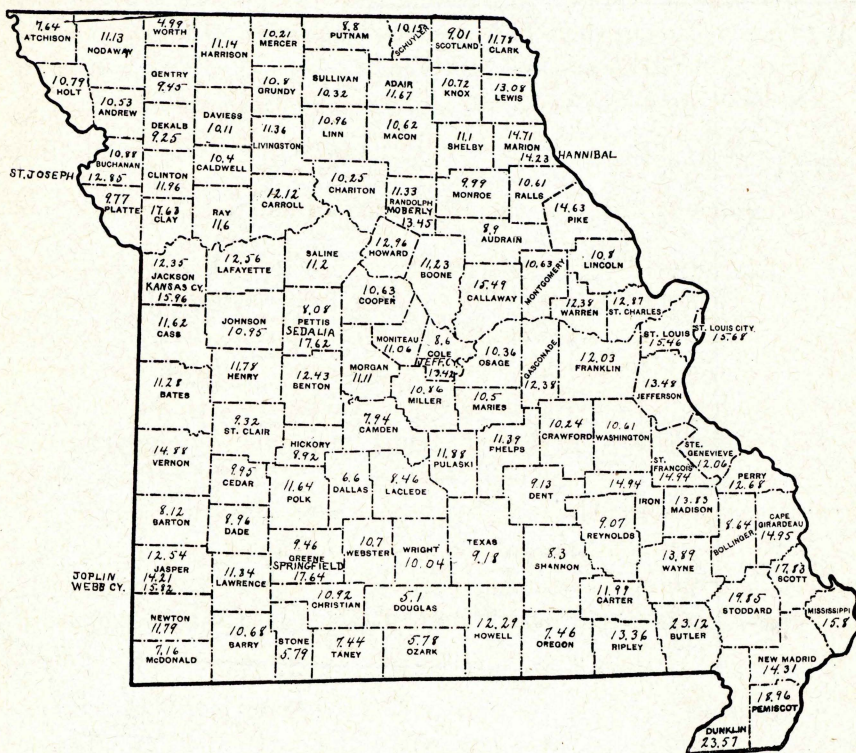
While St. Louis and Kansas City, combined, possess but 28.3 per cent of the population of the State, they furnished 50 per cent of the deaths from suicide.



Of the 1,845 accidents, these two cities gave 708, or 38.3 per cent.

**Map Showing Death Rate per Thousand.**

Below is shown the death rate per thousand by counties and principal cities, based upon the reports made to the Central Bureau of Vital Statistics during the year 1911. The estimate is made on the population of the State as shown by the census of 1910.



Of the cities, Springfield shows the highest death rate per thousand, 17.64, and Joplin shows the lowest, which is 12.41 per thousand.







St. Louis shows a birth rate of 21.83 per thousand, while Kansas City shows a rate of only 18.76.

The average birth rate for the entire State is 22.42 per thousand, which is approximately the rate established as the average rate for the entire country.

### Comparison of Births and Deaths by Months.

The following comparison shows the births exceeded the deaths by 30,468. The month of December shows the highest number of births, 6,789, and June the lowest number, 5,507. The monthly average for the year was 6,155.

The highest number of deaths occurred in January, 4,807. This was due in a great measure to the large number of deaths from pneumonia in its various forms, which was 1,136. The month showing the lowest death rate was September, with a total of 3,029.

The monthly average of the deaths was 3,616.

	Deaths.	Births.
January.....	4,807	6,394
February.....	3,923	6,223
March.....	4,086	6,502
April.....	3,502	5,810
May.....	3,383	5,548
June.....	3,318	5,507
July.....	3,735	5,878
August.....	3,287	6,566
September.....	3,029	6,291
October.....	3,279	6,164
November.....	3,483	6,186
December.....	3,558	6,789
Totals.....	43,390	73,858

### Deaths During 1911 from Twenty-Four Important Causes.

The accompanying table shows the number of deaths from the twenty-four principal causes. It will be noted that tuberculosis in its various forms was the leading cause of death, with a total of 5,035. Following closely upon this come diseases of the heart and circulatory system and pneumonia in its various forms, with totals of 4,919 and 4,521, respectively. Other comparisons will be found in another part of this bulletin.

Stillbirths were not included in this list, and are not counted either as births or deaths. There were approximately 3,500 stillbirths reported to this office in 1911.



Causes.	Number.
Typhoid fever.....	1,012
Smallpox.....	28
Measles.....	579
Scarlet fever.....	295
Whooping cough.....	467
Diphtheria and croup.....	650
Influenza.....	623
Tuberculosis of lungs.....	4,451
Other forms of tuberculosis.....	584
Cancer.....	1,911
Diabetes.....	346
Epidemic cerebrospinal meningitis.....	16
Acute anterior poliomyelitis.....	63
Other diseases of the nervous system.....	3,386
Diseases of heart and circulatory system.....	4,919
Pneumonia and bronchopneumonia.....	4,521
Other diseases of respiratory system.....	1,319
Diarrhœa and enteritis (under 2 years of age).....	2,083
Acute nephritis and brights disease.....	2,730
The puerperal state.....	540
Accidents.....	1,845
Suicides.....	610
Homicides.....	274
Other causes.....	10,138
Total.....	43,390



**The Following Table Shows the Births by Counties and Important  
Cities for the Year 1911:**

County.	Births.	County.	Births.
Adair.....	515	Lincoln.....	342
Andrew.....	325	Linn.....	561
Atchison.....	239	Livingston.....	381
Audrain.....	417	McDonald.....	256
Barry.....	611	Macon.....	674
Barton.....	325	Madison.....	296
Bates.....	569	Maries.....	248
Benton.....	372	Marion (outside of Hannibal).....	245
Bollinger.....	442	Hannibal.....	343
Boone.....	647	Mercer.....	342
Buchanan (outside St. Joe).....	253	Miller.....	433
St. Joseph.....	1,260	Mississippi.....	407
Butler.....	628	Moniteau.....	307
Caldwell.....	312	Monroe.....	371
Callaway.....	485	Montgomery.....	243
Camden.....	279	Morgan.....	322
Cape Girardeau.....	667	New Madrid.....	585
Carroll.....	482	Newton.....	684
Carter.....	156	Nodaway.....	650
Cass.....	520	Oregon.....	319
Cedar.....	365	Osage.....	415
Chariton.....	526	Ozark.....	355
Christian.....	468	Pemiscot.....	500
Clark.....	222	Perry.....	428
Clay.....	370	Pettis (outside of Sedalia).....	328
Clinton.....	304	Sedalia.....	394
Cole (outside of Jefferson City).....	245	Phelps.....	344
Jefferson City.....	214	Pike.....	382
Cooper.....	362	Platte.....	339
Crawford.....	345	Polk.....	582
Dade.....	320	Pulaski.....	333
Dallas.....	355	Putnam.....	347
Daviess.....	349	Ralls.....	264
DeKalb.....	265	Randolph (outside of Moberly).....	364
Dent.....	354	Moberly.....	217
Douglas.....	330	Ray.....	443
Dunklin.....	1,218	Reynolds.....	265
Franklin.....	732	Ripley.....	323
Gasconade.....	362	St. Charles.....	559
Gentry.....	354	St. Clair.....	357
Greene (outside of Springfield).....	682	St. Francois.....	1,050
Springfield.....	762	Ste. Genevieve.....	260
Grundy.....	349	St. Louis.....	1,474
Harrison.....	483	St. Louis City.....	15,001
Henry.....	562	Saline.....	597
Hickory.....	214	Schuyler.....	223
Holt.....	337	Scotland.....	241
Howard.....	282	Scott.....	749
Howell.....	602	Shannon.....	315
Iron.....	247	Shelby.....	300
Jackson (outside of Kansas City).....	613	Stoddard.....	968
Kansas City.....	4,664	Stone.....	314
Jasper (outside of Joplin and Webb City).....	1,057	Sullivan.....	545
Joplin.....	548	Taney.....	195
Webb City.....	335	Texas.....	533
Jefferson.....	692	Vernon.....	643
Johnson.....	546	Warren.....	157
Knox.....	245	Washington.....	355
Laclede.....	390	Wayne.....	467
Lafayette.....	631	Webster.....	464
Lawrence.....	702	Worth.....	177
Lewis.....	308	Wright.....	467



## **DEATHS FROM TWENTY-FOUR IMPORTANT CAUSES BY COUNTY AND PRINCIPAL CITIES.**

The table on pages 19 to 22, inclusive, gives in detail form the deaths from the important causes by counties and principal cities.

While the death rate for the entire State is 13.17 per thousand, the rate for St. Louis and Kansas City is higher, being 15.68 and 15.96 per thousand, respectively.

Under the heading "Other Causes" is placed all diseases not included in the twenty-three specified causes, and all ill-defined diseases. At a later date the deaths will be given under one hundred and eighty-nine causes, as established by the International Classification:



DEATHS FROM TWENTY-FOUR IMPORTANT CAUSES BY COUNTY AND PRINCIPAL CITIES.

County.	Total deaths during the year.	Important causes of death.																								
		Other causes.	Homicides.	Suicides.	Accidents.	The puerperal state.	Acute Nephritis and Brights Disease.	Diarrhoea and Enteritis (under 2 yrs. of age).	Other diseases of respiratory system.	Pneumonia, Broncho-pneumonia.	Diseases of heart and circulatory system.	Other diseases of the nervous system.	Acute Anterior Poliomyelitis.	Epidemic Cerebrospinal Meningitis.	Diabetes.	Cancer.	Other forms of tuberculosis.	Tuberculosis of the lungs.	Influenza.	Diphtheria and Croup.	Whooping Cough.	Scarlet Fever.	Measles.	Smallpox.	Typhoid Fever.	
Adair	265	6																				9	2			
Andrew	161	4																								
Atchison	104																									
Audrain	193	4																								
Barry	255	16																								
Barton	136	4																								
Bates	292	10																								
Benton	185	11																								
Bollinger	126	10																								
Boone	343	9																								
Buchanan, outside St. Joseph.	170	3																								
St. Joseph	995	24																								
Butler	477	14																								
Caldwell	152	5																								
Callaway	378	10																								
Camden	92	1																								
Cape Girardeau	413	17	2																							
Carroll	280	4																								
Carter	66																									
Cass	267	4																								
Cedar	160	2																								
Chariton	241	3																								
Christian	173	8																								
Clark	151	4																								
Clay	358	8																								
Clinton	183	3																								
Cole, outside Jefferson City	87	1	2																							



## DEATHS FROM TWENTY-FOUR IMPORTANT CAUSES BY COUNTY AND PRINCIPAL CITIES—Continued.

County.	Total deaths during the year.	Important causes of death.																							
		Other causes.	Homicides.	Suicides.	Accidents.	The puerperal state.	Acute Nephritis and Brights Disease.	Diarrhoea and Enteritis (under 2 yrs. of age).	Other diseases of respiratory system.	Pneumonia, Broncho-pneumonia.	Diseases of heart and circulatory system.	Other diseases of the nervous system.	Acute Anterior Poliomyelitis.	Epidemic Cerebrospinal Meningitis.	Diabetes.	Cancer.	Other forms of Tuberculosis.	Tuberculosis of the lungs.	Influenza.	Diphtheria and Croup.	Whooping Cough.	Scarlet fever.	Measles.	Smallpox.	Typhoid Fever.
Jefferson City.	159	8		1													23	3		1					
Cooper.	216	7	1		2												26	3	1	1					
Crawford.	139	8			6												14	4			1				
Dade.	140	10															8	13		6	1				
Dallas.	87	6															1	2		4					
Davies.	178	5	1			4											21	4	5	2					
DeKalb.	116	1															8	1	5	3	2				
Dent.	121	4											2				13	2	4	2					
Douglas.	85	3															1	7	1		2				
Dunklin.	715	12	41	40	72	74							3				58	6	7	7					
Franklin.	359	7															38	3	5	12					
Gasconade.	159	4															9	5	5	2					
Gentry.	159	6	1	1	1	1							2				12	2	6						
Greene, outside Springfield.	271	8															7	6	1						
Springfield.	621	40															60	7	6	25					
Grundy.	181	4															10	3	9	4					
Harrison.	229	5															23	5	4	3					
Henry.	321	6															24	3	5	1					
Hickory.	78	3															3	22	2						
Holt.	157	4															4	1	7						
Howard.	203	3															3	4	1	2					
Howell.	259	13															8	8	2	7					
Iron.	128	5	1	2	1												14		3	5					
Jackson, outside Kansas City.	434	8	1														26	4	10	4					
Kansas City.	3,966	72	6	6	12	29	32	29	374	40	230	30	1	1	313	534	415	20	374	40					
Jasper, outside Joplin and Webb City.	575	28	1	1	2	10	11	16	75	6	18	4		1	38	63	50	18	23	29	1	25	9	3	143



Joplin.....	456	13	.....	1	.....	10	5	2	68	7	17	3	.....	1	33	46	49	7	33	16	11	24	9	4	97
Webb City.....	187	3	.....	2	1	3	5	.....	37	2	2	.....	.....	1	10	14	12	3	20	9	6	14	1	1	41
Jefferson.....	376	10	.....	1	1	7	6	.....	41	15	.....	1	.....	1	25	39	29	16	24	17	2	24	4	3	96
Johnson.....	288	4	.....	.....	.....	3	1	4	20	2	18	6	1	.....	33	28	28	11	11	21	2	8	2	3	85
Knox.....	133	5	.....	3	1	1	1	1	13	5	6	1	.....	.....	18	16	8	2	4	8	2	3	.....	.....	35
Laclede.....	147	6	.....	.....	.....	.....	5	1	17	1	3	1	.....	1	9	14	25	2	7	6	2	8	1	.....	38
Lafayette.....	379	10	.....	2	1	5	4	12	35	8	20	5	.....	2	33	46	36	18	14	11	4	16	1	1	95
Lawrence.....	315	15	.....	6	1	6	8	8	39	3	15	1	.....	1	25	18	39	11	18	16	6	15	4	1	69
Lewis.....	203	2	.....	6	1	1	4	5	20	5	6	1	.....	1	16	24	21	6	7	17	3	6	1	.....	50
Lincoln.....	184	2	.....	.....	.....	.....	3	5	23	4	5	3	.....	2	16	24	19	8	4	12	2	4	2	.....	46
Linn.....	277	4	.....	7	1	.....	5	2	30	5	12	.....	.....	1	29	45	21	9	10	20	4	10	5	.....	57
Livingston.....	221	4	.....	.....	2	1	1	3	26	4	9	3	.....	.....	17	24	16	6	7	16	1	9	1	3	68
McDonald.....	97	5	.....	1	.....	1	9	2	9	.....	3	.....	.....	.....	5	10	10	1	3	4	1	3	.....	.....	30
Macon.....	328	14	.....	7	2	.....	5	8	28	3	20	5	.....	.....	34	28	38	3	15	22	6	13	3	.....	74
Madison.....	156	8	.....	2	.....	1	5	7	23	2	3	1	.....	.....	8	11	10	8	12	2	1	4	1	1	46
Maries.....	106	8	.....	1	.....	.....	9	2	11	2	4	.....	.....	2	5	7	8	5	6	2	2	1	.....	.....	31
Marion, outside Han-																									
nibal.....	180	4	.....	.....	1	.....	2	4	19	1	11	1	.....	.....	17	20	29	11	1	12	2	5	3	1	36
Hannibal.....	261	4	.....	.....	1	2	1	5	27	6	15	6	.....	.....	17	29	19	5	8	12	2	16	2	2	82
Mercer.....	126	2	.....	6	2	.....	3	15	1	1	.....	.....	1	12	10	24	1	8	7	2	1	1	.....	.....	29
Miller.....	182	6	.....	1	6	.....	10	5	18	2	4	.....	1	.....	13	18	20	4	11	4	3	8	.....	.....	48
Mississippi.....	230	11	1	2	.....	5	3	2	20	4	7	1	.....	.....	11	6	24	10	30	5	5	5	1	2	75
Moniteau.....	159	2	.....	.....	.....	.....	1	1	12	2	6	2	.....	.....	14	17	15	9	4	16	1	3	1	.....	53
Monroe.....	183	4	.....	.....	1	.....	1	5	15	4	9	2	.....	.....	15	17	15	2	7	23	2	5	.....	1	55
Montgomery.....	166	6	.....	2	1	.....	2	16	2	13	1	.....	.....	.....	12	19	17	9	8	9	2	9	2	.....	36
Morgan.....	143	6	.....	3	1	.....	3	6	14	2	7	1	.....	.....	15	8	18	7	6	6	7	2	.....	.....	31
New Madrid.....	279	2	1	22	1	5	6	.....	15	2	1	.....	1	.....	10	15	34	4	31	4	6	17	1	6	95
Newton.....	320	5	.....	2	1	4	8	3	43	2	11	.....	.....	.....	23	35	40	9	19	17	3	16	1	3	75
Nodaway.....	321	5	.....	6	.....	2	2	10	30	3	20	3	.....	1	38	40	39	5	8	19	2	12	5	.....	71
Oregon.....	111	7	.....	1	1	3	1	1	13	1	1	1	.....	1	5	10	13	1	9	7	2	1	.....	1	31
Osage.....	148	10	.....	5	1	5	6	7	8	3	4	.....	.....	.....	11	14	11	4	7	1	1	4	1	.....	45
Ozark.....	69	3	.....	.....	2	1	4	15	1	2	.....	.....	.....	.....	3	2	.....	2	1	.....	3	3	2	.....	25
Pemiscot.....	371	3	1	26	.....	14	7	.....	34	2	1	.....	.....	.....	18	5	49	4	48	5	8	15	3	6	122
Perry.....	189	8	.....	4	2	8	1	3	13	2	6	.....	.....	1	13	8	17	6	18	12	5	9	1	1	51
Pettis, outside Sedalia..	130	2	1	.....	1	1	2	8	8	1	4	.....	.....	.....	12	12	14	5	2	11	6	5	.....	.....	35
Sedalia.....	314	15	1	.....	1	2	5	6	28	6	11	3	.....	.....	21	26	38	5	10	30	6	11	3	2	84
Phelps.....	180	7	2	.....	.....	.....	2	.....	21	4	6	.....	1	.....	16	19	10	6	10	20	2	5	2	1	44
Pike.....	330	8	.....	1	1	1	3	32	6	24	1	.....	1	32	35	30	9	9	20	6	7	2	1	.....	101
Platte.....	141	5	.....	.....	1	1	1	10	1	4	1	.....	1	12	26	14	1	1	13	1	6	2	.....	.....	40
Polk.....	251	11	.....	5	2	.....	12	3	26	.....	5	1	.....	.....	20	25	29	4	11	22	1	12	1	.....	61
Pulaski.....	136	9	.....	4	1	.....	7	2	8	3	3	.....	.....	11	11	15	1	3	5	2	4	3	.....	.....	44
Putnam.....	126	2	.....	4	.....	2	1	2	11	4	5	1	.....	2	16	15	16	1	2	6	.....	4	.....	1	31
Ralls.....	137	2	.....	.....	.....	.....	2	.....	8	2	9	.....	.....	1	17	16	17	1	6	13	.....	2	.....	2	39
Randolph, outside Mo-																									
berly.....	173	3	.....	.....	1	3	1	3	13	1	9	.....	.....	.....	18	13	10	4	6	17	4	12	1	2	52



DEATHS FROM TWENTY-FOUR IMPORTANT CAUSES BY COUNTY AND PRINCIPAL CITIES—Continued.

County.	Total deaths during the year.....	Important causes of death.																							
		Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 yrs. of age.).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....
Moberly.....	147	4			2	4		24		8	2				13	9	14	5	7	6	1	7	2	1	38
Ray.....	249	9		6	3	2	3	29	6	11	1				17	27	28	3	5	11	5	10	1		72
Reynolds.....	87	4			1	4	3	6		2					4	3	11	4	4	2	4				33
Ripley.....	175	5		9	2	10	3	16	3	3	1				10	5	22	8	8	5	2	4	1		58
St. Charles.....	318	4		2	1	2	2	18	4	14	3				23	57	29	10	14	19	1	20	6	2	81
St. Clair.....	153	5		2		4	16	1	8	3					16	17	17	7	6	7	2	4	1		35
St. Francois.....	534	12	2	14	3	8	3	64	12	11	1			2	43	23	59	12	45	42	7	31	2	6	130
Ste. Genevieve.....	128	5		3		1	1	18	1	1	1				7	10	15	8	8	10	2	8			29
St. Louis.....	1,275	19		13	7	7	10	14	468	13	31	9			78	121	82	46	43	56	8	57	24	5	164
St. Louis City.....	10,775	107		117	180	30	113	54	932	168	568	100	4	7	650	1690	1183	436	613	929	94	500	279	104	1,917
Saline.....	330	7	1			3	9	39	5	12	2				41	44	26	6	11	7	2	14	1	1	99
Schuyler.....	92	1				1	5	14	3	3	1	1			9	7	15	2	2	2	3	3			25
Scotland.....	107	1			1	2		6	1	10					10	15	7	3		2	1	9	1		38
Scott.....	399	11		26	1	7	11	1	27	5	7	2			10	18	56	15	29	14	5	18			136
Shannon.....	95	5		3	4	1	4	2	1		1				1	5	4	1	14	6	4	4			34
Shelby.....	175	2					5	24	3	7	2				13	27	14	4	1	10	3	4	2	1	53
Stoddard.....	552	15		36	2	36	13	9	43	7	4	1	2	1	29	11	92	9	44	15	9	13	1	2	158
Stone.....	69	5		2		5	4	7		1	1				3	7	6	1	2	1	1	3	1		19
Sullivan.....	192	9		8		1		4	20	1	11	1			10	19	17	3	8	11	3	5	2		59
Taney.....	68					2		13		4	1				3	1	10	2	4	3		1		1	23
Texas.....	197	6			1	2	6	12	21	2	10	2		5	17	9	18	5	11	7	4	6	1		52
Vernon.....	429	7	1			1	2	8	38	4	15	5			77	46	48	16	6	27	8	14	4	2	100
Warren.....	113	4			2	1		7	1	10	4				9	6	11	3	6	8	3	9			29
Washington.....	142	8			8	3	4	15	2	7	3				10	11	11	2	8	5	2	1	1		41
Wayne.....	211	7		10		4	10	21		5					12	14	22	10	15	6	3	3	2	2	57
Webster.....	186	12		3	2	9	8	21	1	5	3	2	1		12	11	26	4	2	12	3	6	3	1	39
Worth.....	40			1			1	1	1	2					8	2	2	2	2	6		1	1	1	10
Wright.....	184	8		6	1	6	7	19	2	6	1				16	10	24	8	5	15	4	5	1	1	39
Totals.....	43,390	1012	28	579	295	467	650	623	4451	584	1911	346	16	63	3386	4919	4521	1319	2083	2730	540	1845	610	274	10,138







BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age)	Bright's Disease.....	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Audrain—</b>	21,687																												
January.....		27	21						1	3		1				4	6				2	1	1						3
February.....		32	21			1				3						1	3	5		1									5
March.....		36	20						1	2							4	8			2		1						3
Total.....		95	62																										
<b>Barry—</b>	23,869																												
January.....		49	26	1			1		1		1					3	2	6											8
February.....		56	34						1	4		1		2		1	1	7			3		1	1					11
March.....		62	27						2	3	3		1	2		1	4	4				1							6
Total.....		167	87																										
<b>Barton—</b>	16,747																												
January.....		35	12							1		1					1	1	1					4					3
February.....		30	18						2	2	1		1			1	2	4						1	1				3
March.....		31	20			1							1	1	1	1	3	3	1		2	1							5
Total.....		96	50																										
<b>Bates—</b>	25,869																												
January.....		47	25				2	1			1		2			3	5	4			1		1						5



February.....	37	30	...	...	1	...	2	1	2	...	1	...	...	2	5	3	2	...	2	1	3	...	5
March.....	55	28	...	...	...	...	1	1	1	...	1	1	...	2	6	5	1	...	1	1	...	...	8
Total.....	139	83	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Benton—</b>	14,881																						
January.....	33	14	...	...	...	...	...	3	...	...	...	...	1	...	2	2	...	1	...	1	...	...	4
February.....	40	13	...	...	...	...	...	1	...	...	...	...	...	7	...	...	...	...	...	...	...	...	5
March.....	33	13	...	...	...	...	1	3	...	...	...	...	...	...	2	...	...	1	...	1	...	...	5
Total.....	106	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Bollinger—</b>	14,576																						
January.....	51	9	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	...	1	...	1	...	3
February.....	42	16	1	...	1	...	...	1	1	...	1	...	1	2	4	...	...	...	...	...	...	...	4
March.....	26	13	...	...	...	...	...	2	...	...	1	...	1	1	1	2	...	...	...	1	...	...	4
Total.....	119	38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Boone—</b>	30,533																						
January.....	65	38	...	3	...	...	2	3	2	1	1	...	1	5	4	2	...	1	...	3	...	...	10
February.....	49	42	...	1	...	...	1	7	...	...	...	...	5	2	11	3	1	2	...	1	...	...	8
March.....	52	36	...	...	...	...	...	7	...	1	...	...	3	5	4	3	...	2	1	1	...	...	9
Total.....	166	116	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Buchanan (outside St. Joseph)—</b>	15,517																						
January.....	19	24	2	...	...	...	...	1	...	1	...	...	2	2	8	...	...	3	...	...	1	...	4
February.....	25	16	...	...	...	...	...	...	1	...	...	...	2	3	4	...	...	2	...	...	...	...	4
March.....	21	14	...	...	1	1	...	4	...	...	1	...	1	1	1	1	...	...	1	...	...	...	2
Total.....	65	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>St. Joseph City—</b>	77,403																						
January.....	129	96	4	...	...	...	...	6	1	7	...	...	13	15	17	2	1	10	1	9	1	...	9
February.....	99	88	2	...	...	...	1	8	3	1	...	...	12	11	16	1	1	4	2	5	2	...	19
March.....	136	100	2	...	1	...	2	9	...	6	3	...	12	11	18	2	1	8	3	3	2	...	17
Total.....	364	284	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912.—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Butler—</b>	20,624																											
January.....		49	52					3	1		4	2	1				1		16		2		2	1	2			16
February.....		70	34	2				3			2	1					2		8			1	3	1		1		9
March.....		70	55			1		4	1		3	1	1					2	20				1	2				19
Total.....		189	141																									
<b>Caldwell—</b>	14,605																											
January.....		33	12						1		1							4	1	1						1		3
February.....		26	20				1			1	2	1	1				2	2	3	1			1		1			4
March.....		31	8									1					1	4	1						1			
Total.....		90	40																									
<b>Callaway—</b>	24,400																											
January.....		45	27							1	5	1	1	1			4	1	1	2			3	1		1		5
February.....		45	34						1		2	1	1	1			6	5	4	1			1		2			9
March.....		40	28								3	1	2	1			7	2	5	2					1		1	3
Total.....		130	89																									
<b>Camden—</b>	11,582																											
January.....		24	7							1							1	1	1	1			1	1				



[illegible]



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Charlton—</b>	23,503																											
January.....		41	29	1							5		2				1	6	7			1						6
February.....		35	28	1					1		1	1	3	2			1	2	6	1		3		2				4
March.....		59	23					1		1	3						1	3	6	1					1			6
Total.....		135	80																									
<b>Christian—</b>	15,832																											
January.....		26	18	1							1						3		7				1	1				4
February.....		48	18						1		1						1	1	5	1		1	1		1			5
March.....		47	18						1		5	1						1	5	2								3
Total.....		121	54																									
<b>Clark—</b>	12,811																											
January.....		22	7								1						1		2					1				2
February.....		19	14							1				1				1	5	2		2						2
March.....		22	15					2			1		2				2	2	3			1						2
Total.....		63	36																									
<b>Clay—</b>	20,302																											
January.....		32	33	1							3		4	1			4	3	5	1		1		2	1			7



February.....	29	29	...	...	...	...	...	1	4	...	1	2	1	...	2	3	6	...	...	3	...	2	1	...	3
March.....	35	15	...	...	...	...	...	1	1	...	1	...	1	...	1	4	2	...	...	3	...	1	...	...	2
Total.....	96	77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Clinton—	15,297																								
January.....	27	14	...	...	...	...	1	1	...	...	...	...	...	...	1	3	...	...	3	...	1	...	...	...	4
February.....	24	9	...	...	...	...	1	...	...	...	...	...	...	1	3	2	...	...	...	...	...	...	...	...	2
March.....	37	16	...	...	...	...	...	2	...	1	...	2	...	1	1	3	...	...	4	...	...	...	...	...	2
Total.....	88	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cole (outside Jefferson City)—	10,107																								
January.....	32	8	2	...	...	...	...	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	...	...	2
February.....	21	7	...	...	...	...	...	...	...	...	...	...	...	3	1	1	...	...	...	...	1	...	...	...	1
March.....	22	9	...	...	...	...	2	...	...	...	...	...	...	1	1	2	...	1	...	...	...	...	...	...	2
Total.....	75	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jefferson City—	11,850																								
January.....	22	11	...	...	...	1	...	...	1	1	...	...	...	1	3	3	...	...	...	...	...	...	...	...	1
February.....	20	14	...	...	...	2	1	...	1	...	1	...	...	2	3	1	...	2	...	...	...	...	...	...	2
March.....	12	16	...	...	...	1	1	1	1	1	...	...	...	2	3	3	...	...	...	2	...	1	...	...	1
Total.....	54	41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cooper—	20,311																								
January.....	33	24	...	...	...	2	1	1	1	...	...	...	...	2	1	1	2	...	4	1	1	...	...	...	7
February.....	38	19	...	...	...	1	1	...	...	...	...	...	...	6	1	3	1	...	1	...	...	...	...	...	5
March.....	28	21	1	...	...	1	3	1	...	1	...	...	...	2	3	3	...	1	1	...	...	...	...	...	4
Total.....	99	64	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Crawford—	13,576																								
January.....	22	7	...	...	...	...	1	1	...	...	...	...	...	...	2	...	...	1	1	...	...	...	...	...	1
February.....	26	17	...	...	3	1	2	...	1	...	...	...	...	2	2	1	...	1	...	...	...	...	...	...	4
March.....	35	15	...	...	2	...	3	...	1	...	...	...	...	1	2	3	...	...	...	1	...	...	...	...	2
Total.....	83	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...











**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.**

Counties.	Population, 1910.	Total births during the quarter.	Total deaths during the quarter.	Important causes of death.																								
				Typhoid Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Tuberculosis of the Lungs.	Other forms of Tuberculosis.	Cancer.	Diabetes.	Epidemic Cerebrospinal Meningitis.	Acute Anterior Poliomyelitis.	Other diseases of the nervous system.	Diseases of the heart and circulatory system.	Pneumonia, Bronchopneumonia.	Other diseases of respiratory system.	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.	The puerperal state.	Accidents.	Suicides.	Homicides.	Other causes.	
<b>Gentry—</b>	16,820																											
January.		39	8															1				2						4
February.		36	14	1							2		1			2		3	1	2		1						
March.		37	15							1							5	4	2			1						2
Total.		112	37																									
<b>Greene (outside Springfield)—</b>	28,630																											
January.		66	26					1		1						3	1	5	1			1	1	1				11
February.		47	26					1		2	3	1	1			4	2	7			1						1	3
March.		57	31								3	1				1	5	7	1	1		2		1				9
Total.		170	83																									
<b>Springfield City—</b>	35,201																											
January.		70	58						1		10			2	1		6	10	7	1								15
February.		68	50							1	6		1	1	1		6	9	7	3		3	1	5				6
March.		69	58	1					1	3	7		3		4		4	7	5	3		5	1	5				9
Total.		207	166																									
<b>Grundy—</b>	16,744																											
January.		24	26	1						1	4					4	1	4	1			4		2				4



February.....	39	23							1	1	2					4	4	3		1	1		1			5
March.....	32	20							5							1	3	3			1					7
Total.....	95	69																								
<b>Harrison—</b>	20,466																									
January.....	46	18	1					1	3		1					2	2	1			2		1			4
February.....	41	22					1		1		2					4	3	4					1	1		5
March.....	34	24							2							4	3	7			2	2	1			3
Total.....	121	64																								
<b>Henry—</b>	27,242																									
January.....	53	32					1	1			1		1			2	6	5					4			11
February.....	49	31							2		2		1			1	5	5	1			1	1			12
March.....	48	35					1	4		4		1				2	8	7	1		2		2			3
Total.....	150	98																								
<b>Hickory—</b>	8,741																									
January.....	22	11	1				1	2									1	3								3
February.....	18	18							2	2		1	1				3	3	1	1			1	1		1
March.....	17	9					1	1										3								4
Total.....	57	38																								
<b>Holt—</b>	14,539																									
January.....	32	16							2		1					5		4					2			2
February.....	33	9					1		2	1		1					2	2								
March.....	36	16						1			1		1				2	5			3					3
Total.....	101	41																								
<b>Howard—</b>	15,653																									
January.....	26	17					1				5			1		1	1	4			1		1			2
February.....	24	11							1	2		2					1	4								1
March.....	23	20								3			1				5	4		1	1		2			3
Total.....	73	48																								



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Howell—</b>	21,065																											
January.....		55	24	1					3		4						5		2									8
February.....		62	32	1							6		1	1			4	2	7		2		1		1			6
March.....		46	33	2					3		2		2				2	3	3		2		2					6
Total.....			163	89																								
<b>Iron—</b>	8,563																											
January.....		22	16								1						2		7		1							4
February.....		30	16							1	1		1				1	1	5						2			2
March.....		23	9								1		3					2	1		1							1
Total.....			75	41																								
<b>Jackson (outside Kansas City)—</b>	35,141																											
January.....		39	40	1			2		3		2	2	1				4	4	2	2			2	1	1			13
February.....		51	43								2	2					5	7	5	2			3	1				13
March.....		53	45	1						1		5	1	1		1		3	9	6	1			1		2		13
Total.....			143	128																								
<b>Kansas City—</b>	248,381																											
January.....		473	353	2			1		4	2	35	5	19	5	8		10	52	57	5	5	19	4	23	5	1		91



February.....	433	376	...	...	...	1	3	34	6	20	4	31	...	22	61	50	5	7	17	4	27	12	...	71
March.....	379	431	5	...	1	1	2	28	7	27	5	63	...	12	67	43	18	9	22	7	21	11	3	77
Total.....	1,285	1,160	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Jasper</b> (outside Joplin and Webb City)—	45,783	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January.....	114	49	...	...	...	1	...	9	...	1	1	...	...	1	5	9	3	...	4	2	3	1	...	9
February.....	77	53	1	...	1	1	3	7	1	2	...	...	...	5	6	12	2	...	1	...	2	...	...	9
March.....	90	42	1	...	1	...	...	7	1	1	...	...	...	...	6	7	...	1	4	1	3	...	...	9
Total.....	281	144	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Joplin—</b>	32,073	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January.....	64	46	1	...	1	...	...	4	...	2	...	...	...	5	7	6	1	2	2	...	3	2	...	10
February.....	52	50	...	1	...	...	...	6	...	1	...	...	...	2	11	7	2	1	5	...	4	1	...	9
March.....	66	43	...	...	1	1	...	6	...	2	...	...	...	3	3	8	2	2	2	...	1	...	...	12
Total.....	182	139	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Webb City—</b>	11,817	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January.....	48	18	...	...	...	2	1	2	...	...	...	...	...	...	1	1	3	1	...	...	2	1	...	4
February.....	34	13	...	...	...	1	...	4	...	1	...	...	...	1	...	2	...	...	1	1	...	...	...	2
March.....	28	22	...	...	...	2	3	...	2	...	...	...	...	...	2	3	...	...	3	...	2	1	...	4
Total.....	110	53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Jefferson—</b>	27,878	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January.....	69	31	...	...	...	1	4	1	1	...	...	...	...	4	3	2	...	...	1	...	3	...	...	11
February.....	66	40	1	1	...	...	7	...	2	...	...	...	...	3	3	4	4	1	3	1	2	...	...	8
March.....	48	32	1	...	1	1	4	...	2	...	...	...	...	1	5	1	3	...	1	...	3	1	...	8
Total.....	183	103	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>Johnson—</b>	26,297	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January.....	38	27	1	...	1	...	1	...	2	...	...	...	...	3	5	2	1	1	1	...	3	1	...	5
February.....	46	31	1	1	...	2	...	...	2	1	...	...	...	1	2	7	2	...	2	...	...	...	...	10
March.....	39	42	1	...	...	3	...	3	...	1	...	...	...	3	4	11	2	1	2	...	1	...	...	10
Total.....	123	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Knox—</b>	12,403																											
January.....		25	6							3						1	1											1
February.....		19	19													2	4	6	1									6
March.....		21	12							1						2	3	1			2							3
Total.....		65	37																									
<b>Laclede—</b>	17,363																											
January.....		39	20					3		3		1				2	1	5	1									4
February.....		24	20				2	1		3						2	1	4	2		1							4
March.....		37	12	1			1	2				1				2	2		1									2
Total.....		100	52																									
<b>Lafayette—</b>	30,154																											
January.....		55	45	1			4		1	3	2		2	1		3	10	6	1		1		2					8
February.....		55	28				1	2		1	3		2			2	1	2	1		2		4	1				6
March.....		58	38				1	2		5	1	1			1	2	6	6	2		3	1						7
Total.....		168	111																									
<b>Lawrence—</b>	26,583																											
January.....		56	36	4					1	1	3	1	1		1	2	2	7	2		2		4					5



February.....	48	21	1	...	...	...	1	...	3	1	1	...	...	2	1	4	2	...	2	...	1	...	...	2
March.....	51	36		...	...	...	1	...	4	1	1	...	...	1	6	6	4	1	1	...	...	...	...	10
Total.....	155	93		...	...	...		...				...	...											
<b>Lewis—</b>	15,514																							
January.....	13	10		...	...	...		...				...	...	1	1	2	1	...	1	...	1	1	...	2
February.....	16	17		...	...	...	3	3	...	1	...	...	1	3	2	1	...	1	1	...	...	...	...	1
March.....	27	17	1	...	...	...	1	1	...	1	1	1	...	1	2	...	...	4	...	...	...	...	...	4
Total.....	56	44		...	...	...			...			...	...											
<b>Lincoln—</b>	17,033																							
January.....	35	16		...	...	...	1	3	...	1	...	...	3	3	1	...	...	2	...	1	...	...	...	1
February.....	40	28		...	...	...		4	...		...	...	1	5	4	1	2	3	...	3	...	...	...	5
March.....	39	20	1	...	...	...	1	5	...	1	...	...	1	2	4	...	...	...	...	...	...	...	...	5
Total.....	114	64		...	...	...			...			...	...											
<b>Linn—</b>	25,253																							
January.....	40	40		...	...	...	2	3	1	2	1	...	1	2	8	6	1	...	1	...	2	1	...	9
February.....	48	34		...	...	...	2	3	...	2	...	...	1	3	7	...	...	3	...	...	...	...	...	13
March.....	46	34		...	...	1	...	2	6	...		...	3	5	5	...	1	1	...	1	1	1	...	7
Total.....	134	108		...	...	...			...			...	...											
<b>Livingston—</b>	19,453																							
January.....	29	40	1	...	...	...		3	...	1	1	...	12	7	4	1	...	2	1	2	...	...	...	5
February.....	38	25		...	...	1	1	...	...	1	...	...	2	5	9	...	...	2	...	1	...	...	...	3
March.....	31	31		...	...	1	2	2	4	...	2	...	2	7	5	...	...	1	...	1	...	...	...	4
Total.....	98	96		...	...	...			...			...	...											
<b>McDonald—</b>	13,539																							
January.....	16	15		...	...	2	...	1	...	1	...	...	1	1	3	1	...	...	...	1	...	1	...	3
February.....	18	6		...	...	...			...		...	...		2	2	...	...	...	...	1	...	...	...	1
March.....	8	6		...	...	...	1	2	...		...	...			2	...	...	...	...	...	...	...	...	1
Total.....	42	27		...	...	...			...			...	...											



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.**

Counties.	Population, 1910.	Total births during the quarter.	Total deaths during the quarter.	Important causes of death.																							
				Typhoid Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Tuberculosis of the lungs.	Other forms of Tuberculosis.	Cancer.	Diabetes.	Epidemic Cerebrospinal Meningitis.	Acute Anterior Poliomyelitis.	Other diseases of the nervous system.	Diseases of the heart and circulatory system.	Pneumonia, Bronchopneumonia.	Other diseases of respiratory system.	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.	The puerperal state.	Accidents.	Suicides.	Homicides.	Other causes.
<b>Macon—</b>	30,868																										
January		42	30							4	1				1	6	1	1			2		3				11
February		64	25							3	1					3	3	1	1		3	1	1				3
March		40	33			1				5	1					4	4	1			4	1	1	1			9
Total		146	88																								
<b>Madison—</b>	11,273																										
January		32	8							1	1						1	2									3
February		29	10						2	2						1	2										3
March		32	8					1								2	2					1					2
Total		93	26																								
<b>Maries—</b>	10,088																										
January		32	8					2			1					1	2										2
February		22	8					2	1		1		1			1	2										
March		28	11							2	1				1	1	2			1							3
Total		82	27																								
<b>Marion (outside Hannibal)—</b>	12,231																										
January		19	14				1			1	2	1			1	2	2	1		1							2



February.....	21	17										1						1	2	7	1				1		1		3
March.....	13	10																2	1	7									
Total.....	53	41																											
<b>Hannibal—</b>	18,341																												
January.....	37	33							3	1	2	1						7	5	7	1							6	
February.....	39	30	1					1	1		2							3	2	8	3			2	1	1		5	
March.....	33	29							5	2		1						1	5	3	2					1	1		8
Total.....	109	92																											
<b>Mercer—</b>	12,335																												
January.....	37	9						1	2									2		1						1		2	
February.....	18	11							1									1	3	4						1		1	
March.....	37	12							1		1							2	2	3					1			2	
Total.....	92	32																											
<b>Miller—</b>	16,717																												
January.....	53	15							1	1								1	1	6					1		1	3	
February.....	30	17						1	1	1		1						4		2					1		1	5	
March.....	29	14							3		1	1								3				3		1		2	
Total.....	112	46																											
<b>Mississippi—</b>	14,557																												
January.....	49	24			1	1		3		3									2	3	2							1	8
February.....	28	22				1	2	1	1	2		1							3	3					1			7	
March.....	31	16	1				4											1	1	3			1	1		1		3	
Total.....	108	62																											
<b>Moniteau—</b>	14,375																												
January.....	19	10							1		1	1						1	2		1				1			2	
February.....	16	17	1						2		1							3	1	1	1			1	1			5	
March.....	36	19									2								3	3	1			2	1	2		5	
Total.....	71	46																											



BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH 31, 1912—Continued.

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Monroe—</b>	18,304	20	18						1		2	1	1					6		1				1				5
		23	19								1		1				2	2	3			1		2				6
		20	19									5		1					4	1		1					1	5
	Total.....	63	56																									
<b>Montgomery—</b>	15,604	37	15						1		2		1					4	3	2				1				
		27	10	1							2		1				1	2	1	1							1	1
		22	7													1	1	1	3	1							1	1
	Total.....	86	32																									
<b>Morgan—</b>	12,863	24	14								3		1						2	1								1
		28	16								2		2					1	5					1				2
		22	18										1					1	6					1				2
	Total.....	74	48																									
<b>New Madrid—</b>	19,488	46	49								7	1	1	1	1													1
	January.....																											13



February.....	57	20	1	1	1	1	3	3	1	1	1	8
March.....	65	28	1	1	1	1	1	2	6	1	2	11
Total.....	168	97										
<b>Newton—</b>	27,136											
January.....	57	27	1	2	2	2	1	3	7	2	3	2
February.....	76	30	4	1	7	3	4	1	1	1	8	
March.....	53	24	3	1	6	2	1	1	2	2	6	
Total.....	186	81										
<b>Nodaway—</b>	28,833											
January.....	57	23	1	2	3	3	3	6	2	2	2	2
February.....	43	29	1	1	1	1	3	1	6	1	2	10
March.....	45	34	1	1	4	1	1	2	4	10	1	6
Total.....	145	86										
<b>Oregon—</b>	14,681											
January.....	43	9	1	1	1	2	1	1	1	1	2	
February.....	39	8	1	1	1	2	1	3	1	1	5	
March.....	46	14	1	1	1	1	1	4	1	1	5	
Total.....	128	31										
<b>Osage—</b>	14,283											
January.....	40	17	2	1	2	1	2	3	1	1	5	
February.....	25	16	1	1	1	2	5	2	2	1	5	
March.....	29	15	1	1	2	1	2	1	1	1	8	
Total.....	94	48										
<b>Ozark—</b>	11,926											
January.....	49	14	1	3	1	1	1	1	1	1	5	
February.....	36	12	1	2	1	2	1	1	1	1	5	
March.....	22	21	2	1	1	2	1	6	1	1	5	
Total.....	107	47										



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea, and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Pemiscot—</b>	19,559																											
January.....		58	29						1		1					2		3	11							1	9	
February.....		61	32					1	1	1	3						1	6	1	1			1	2		1	13	
March.....		27	10					1	1	1								1	2								3	
Total.....		146	71																									
<b>Perry—</b>	14,898																											
January.....		40	12					1								2		1									8	
February.....		41	28	1			1				3	1			1	2	1	7			3			1			6	
March.....		48	16					1		1	1							4			1	1	1				6	
Total.....		129	56																									
<b>Pettis (outside Sedalia)—</b>	16,091																											
January.....		39	12	1												2	1	3			3					1	1	
February.....		22	9				2									1	1	2		1							2	
March.....		23	13									1	1	1		2	2	1		1	2						2	
Total.....		84	34																									
<b>Sedalla—</b>	17,822																											
January.....		21	25							1	4		1			1	5	6							1		6	



February.....	52	23	.....	1	3	1	.....	1	.....	2	1	3	.....	1	.....	10
March.....	32	20	.....	.....	2	2	2	.....	.....	1	3	4	.....	1	2	2
Total.....	105	68	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Phelps—</b>	15,796	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	34	16	.....	1	3	1	.....	.....	.....	2	1	3	.....	2	.....	3
February.....	24	22	.....	2	4	.....	1	.....	.....	1	2	5	1	.....	1	4
March.....	37	31	1	1	3	1	1	.....	1	2	1	9	1	3	.....	6
Total.....	95	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Pike—</b>	22,556	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	46	30	.....	1	5	.....	.....	.....	.....	2	8	4	2	.....	1	6
February.....	29	21	.....	1	.....	.....	.....	.....	.....	2	4	4	.....	1	3	6
March.....	28	27	.....	1	2	.....	1	1	.....	1	2	3	2	4	1	8
Total.....	103	78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Platte—</b>	14,429	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	18	16	1	1	1	.....	.....	.....	.....	1	3	2	1	1	2	3
February.....	23	12	.....	1	.....	.....	.....	.....	.....	1	1	.....	1	1	1	6
March.....	23	26	2	1	1	.....	.....	2	.....	2	2	6	.....	1	1	6
Total.....	64	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Polk—</b>	21,561	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	42	19	.....	1	1	.....	1	.....	.....	1	3	6	.....	1	.....	5
February.....	39	24	.....	1	5	.....	1	.....	.....	1	2	7	2	.....	2	3
March.....	44	23	.....	.....	5	.....	.....	.....	.....	4	2	5	4	1	1	.....
Total.....	125	66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Pulaski—</b>	11,438	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
January.....	30	18	.....	.....	2	.....	.....	.....	.....	1	.....	8	1	.....	1	5
February.....	32	9	.....	1	2	.....	1	.....	.....	.....	.....	1	.....	1	1	2
March.....	30	13	.....	2	2	.....	1	.....	.....	2	.....	3	.....	1	1	1
Total.....	92	40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....



BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH 31, 1912—Continued.

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system....	Pneumonia, Broncho-pneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
Putnam—	14,308																											
	January.....	35	10					1			1							2			1	1	1				3	
	February.....	36	17	1													2	2	5								7	
	March.....	29	15													1	4	6						1	1		2	
		100	42																									
Ralls—	12,913																											
	January.....	35	15								2	1	2					3	1	1		1					4	
	February.....	23	11							1								2	5			1		1			1	
	March.....	19	16	1						1	2			1			2	1	3			1	1				3	
		77	42																									
Randolph (outside Moberly)—	15,259																											
	January.....	32	23					1			4	1	1				3	2	2		2	1		2			4	
	February.....	31	15														2		5			2	1	2			3	
	March.....	15	22							2	3		4				3	2	2				2				2	
		78	60																									
Moberly—	10,923																											
	January.....	28	13								3						1										6	



February.....	13	16					1	2	1			1	2	4		1	1		3
March.....	13	19							1			3	2	3	1	2	2	1	2
Total.....	54	48																	
Ray—	21,451																		
January.....	56	27				3	1	1	1	2	3	1	1	3	2	3		2	4
February.....	39	26				1			3		2		1	7			4		8
March.....	37	25				1			1			2	2	3	5	1	1	1	7
Total.....	132	78																	
Reynolds—	9,592																		
January.....	27	6							2					2	1				1
February.....	34	6					1	1	1				1	1					1
March.....	18	4						1						1					2
Total.....	79	16																	
Ripley—	13,099																		
January.....	54	23	1				3	2					2	2	1		1	2	7
February.....	32	9	1					1					1		2				4
March.....	26	12	1					1				1		6					3
Total.....	112	44																	
St. Charles—	24,695																		
January.....	37	22				1		4					2	4	2	1	1		6
February.....	49	27					1	1	2	2			1	4	4	1	3	1	7
March.....	26	16					1	1		1	1		2	2	2	1	1		4
Total.....	112	65																	
St. Clair—	16,412																		
January.....	25	18	2							3			3		4	1	1		4
February.....	24	17						1		2			1	5	2	1		1	4
March.....	47	21	1				2	3					1	4	7				3
Total.....	96	56																	



BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH 31, 1912—Continued.

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Bright's Disease.....	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>St. Francois—</b>	35,738																												
January.....		95	40						1		4			1			7	6	7	1	1	1	1	1	1				10
February.....		90	46								5		1				1	4	9	1	3	6	1	2	2				13
March.....		71	48					2			6	2	1	1			1	4	12	3	1			1					8
Total.....		256	134																										
<b>Ste. Genevieve—</b>	10,607																												
January.....		23	7							1							1		1										3
February.....		12	4								1		1					1											
March.....		22	12								1							4	4	1									2
Total.....		57	23																										
<b>St. Louis—</b>	82,417																												
January.....		136	120	2		1			3		45		4				7	14	17	6		4	2	2	2	1	1		11
February.....		130	105	2						2	42		3	3			10	10	6	4	1	4		5	1			12	
March.....		148	111				2	1	2	1	32		5		1		4	12	16	4	2	7		5	1	1		15	
Total.....		414	336																										
<b>Saline—</b>	29,448																												
January.....		57	35				1				4		1	1	1		4	4	2	1					2				14



February.....	55	37	1	2	3	4	6	7	1	1	2	1	1	1	7
March.....	62	29	1	1	4	1	2	3	5	3	3	3	3	3	6
Total.....	174	101													
<b>Schuyler—</b>	9,062														
January.....	14	6	2	1	1	1	1	1	1	1	1	1	1	1	1
February.....	23	5	1	1	1	1	1	1	1	1	1	1	1	1	3
March.....	18	22	1	1	1	1	1	1	5	5	1	1	1	1	7
Total.....	55	33													
<b>Scotland—</b>	11,869														
January.....	21	12	2	2	1	1	1	2	1	1	1	1	1	1	5
February.....	20	15	1	1	1	1	1	1	3	3	1	1	1	1	3
March.....	25	12	1	1	1	1	1	2	2	2	1	1	1	1	5
Total.....	66	39													
<b>Scott—</b>	22,372														
January.....	72	26	1	2	2	1	1	1	2	1	4	1	1	3	4
February.....	74	40	2	1	1	1	1	4	1	3	10	2	1	1	10
March.....	77	48	1	4	2	1	1	7	2	1	8	2	1	4	16
Total.....	223	114													
<b>Shannon—</b>	11,343														
January.....	36	3	1	1	1	1	1	1	1	1	1	1	1	1	1
February.....	39	10	2	1	1	1	1	1	1	1	1	1	1	1	4
March.....	21	10	1	1	1	1	1	1	2	3	1	1	1	1	3
Total.....	96	23													
<b>Shelby—</b>	14,864														
January.....	20	24	2	1	2	1	2	4	2	5	1	1	1	1	5
February.....	20	20	1	1	1	1	1	2	2	6	2	1	1	1	4
March.....	19	12	4	1	1	1	1	2	2	3	2	1	1	1	
Total.....	59	56													



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Stoddard—</b>	27,807																											
January.....		102	43					1	2	3	1					2	1	12	2	1		2	3				13	
February.....		85	44	1			1	1	2	5					3	3	1	13		2		2	1			14		
March.....		108	53	1	1			1	1	3	6			1	1	2	3	14	2	2	1	2	1			11		
Total.....		295	140																									
<b>Stone—</b>	11,559																											
January.....		48	9							1							1	1			1					5		
February.....		22	7						1				1				1	3								1		
March.....		40	7	1													1									4		
Total.....		110	23																									
<b>Sullivan—</b>	18,598																											
January.....		38	14							2						3	1	3			1					3		
February.....		36	27					2					1	1			2	9								12		
March.....		48	22					1				1			2	4	7	1		2						2		
Total.....		122	63																									
<b>Taney—</b>	9,134																											
January.....		23	6														1									1	4	







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING MARCH  
31, 1912.—Continued.**

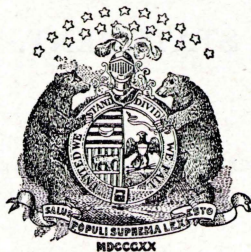
Counties.	Population, 1910.....	Total Births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of the heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Webster—</b>	17,377																											
January.....		53	29					2		2	4							10	2		1							8
February.....		31	8								2		1		1			1	1									2
March.....		30	15					1	1		2	1	1				1	2	1		1							4
Total.....		114	52																									
<b>Worth—</b>	8,007																											
January.....		19	11								1		1				1	1	1			2						4
February.....		13	3										1					2										
March.....		15	8							1			1					1	1		2							2
Total.....		47	22																									
<b>Wright—</b>	18,315																											
January.....		32	18						1	1	1		1				2	1	4					2				5
February.....		33	22						3		4		2				1	1	3	2	1		1					4
March.....		39	20	1						2	3		1				3	1	2	2		1		1				3
Total.....		104	60																									
<b>St. Louis City—</b>	687,029																											
January.....		1,252	952	1			9	2	17	7	81	13	46	16			52	190	171	42	14	69	5	43	26	8	140	



February.....	1,113	993	4	...	1	8	8	11	14	93	7	50	4	3	....	51	175	183	48	28	68	9	45	13	8	162
March.....	1,161	1,006	5	...	...	6	16	9	15	96	14	60	4	4	....	53	208	149	40	17	83	9	39	11	6	162
Total.....	3,526	2,951	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals for January..	6,724	4,043	47	...	7	28	31	87	49	407	49	167	45	20	2	300	555	676	136	46	213	46	203	52	21	856
"    February..	6,275	4,062	34	1	7	21	40	51	101	398	36	168	37	43	2	292	519	758	139	67	205	56	176	48	12	851
"    March...	6,222	4,249	47	...	9	13	71	40	101	429	53	185	40	106	5	234	599	716	160	54	253	59	156	42	17	860
Grand totals, quarter	19,221	12,354	128	1	23	62	142	178	251	1234	138	520	122	169	9	826	1673	2150	435	167	671	161	535	142	50	2567



# MISSOURI STATE BOARD OF HEALTH



## QUARTERLY BULLETIN.

NEW SERIES.

VOL. 2.

APRIL-JUNE. JULY-SEPTEMBER, 1912.

NOS. 2 & 3.

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## STATEMENT.

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The April-June number of the Bulletin was not issued at the usual time. That number, however, is combined with and made a part of this issue.

The Vital Statistics table in this issue covers a period of six months, from April to September, inclusive.

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### ANSWERING NUMEROUS INQUIRIES CONCERNING THE TRANSACTIONS OF THE INTERNATIONAL CON- GRESS OF HYGIENE AND DEMOGRAPHY.

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**BULLETIN**  
OF THE  
**Missouri State Board of Health**  
NEW SERIES

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**HOW THE MODEL LAW WAS INSTALLED IN MISSOURI.**

Dr. Frank B. Hiller, Secretary Missouri State Board of Health.

In discussing the installing of the Model Vital Statistics law in a state one must necessarily discuss its early administration. The administration, in a sense, goes hand in hand with the installing, and I prefer to detail to some extent, certain of the administrative features in our State.

The law was enacted by the General Assembly in 1909, but because of certain deterring conditions, we were delayed in putting it in operation until March, 1910.

A feature of the Missouri law which we regard as admirable, is the provision empowering the State Board of Health to choose the Local Registrars instead of these officers being *ex officio*, as is provided in the statutes of other states. With a free hand being given the Board in this matter, after much deliberation it was resolved to appoint physicians wherever possible to the position of Local Registrar.

It is true, that in many districts we have been unable to carry out this rule. This has been due to the fact that in certain small subdivisions of the State no physicians were found to reside, and in other subdivisions where physicians were residing, we found it preferable, for certain and various reasons to select laymen.

We have, in the State, something like 1,150 Local Registrars. Of this number probably 950 are members of the medical profession and men prominent and active in practice in their various communities.

**QUALIFICATIONS OF LOCAL REGISTRARS.**

In enumerating the qualifications of a Local Registrar I will say he should be a physician, the most representative of his profession of the district in which he resides; he should be a man identified with the affairs of his community; one who has the qualifications of discussing



and teaching; a believer in the virtues of the law; he should be possessed of sufficient executive ability to administer the law with the least friction possible; he should possess the faculty of getting along well with his competitors.

In the early operations of the law, Local Registrars, of course, must become the teachers and instructors of the people relative to its application and as to how its various requirements shall be met. A Local Registrar possessing the qualifications just enumerated, is not only able to have from the people the legal compliance to the law, but he will obtain from the people their moral support in its enforcement.

In the enforcement of this law, a Local Registrar, by realizing his moral obligations and acting on these, is able to obtain fully as much success as he is able to obtain by a full realization of the legal obligations he has assumed.

In selecting a physician as Local Registrar, the medical profession of the community is more actively interested in the law and at the same time the profession is caused to feel a greater responsibility in its satisfactory and complete application.

Medical societies, as a result of thus recognizing the profession, are caused to make the subject of Vital Statistics a special portion of the program at the various meetings. We believe that a closer union of the profession in working for the public health thereby results.

Often in sparsely settled sections of the State, a physician who is Local Registrar of a district is the only physician in that community. In view of this fact, he, at first hand, has direct knowledge of all births occurring in his district, as well as all deaths occurring. This would not be true did a layman serve in the same capacity, either in a sparsely or densely settled district.

Where, for certain reasons, it is impossible to secure a physician to serve as Local Registrar, and where in certain districts no physician resides, the selection of a layman as Local Registrar becomes a necessity. I do not believe that the rule should be followed that this layman should be one filling some minor office, such as justice of the peace, etc., but he should be an intelligent man, representative of the citizens of the community in which he resides. He should always be accessible to the people and possess the other qualifications, so far as possible, which a physician possesses, outside, of course, of any knowledge of medicine and surgery.

The qualities of a Vital Statistics law are no stronger than are its various features administered in the districts constituting the State's area.

The matter of administration in its final application rests probably



more heavily upon the Local Registrar than upon the State Registrar; the duties of the last-named officer consisting largely of defining and declaring the policies of administration and supervising the office details of the Central Bureau.

#### DISTRICTING THE STATE.

As an early step in the organization of the Bureau of Vital Statistics, the fixing of boundaries of registration districts demanded attention.

The Missouri law requires that each incorporated city and town shall constitute a primary registration district, and provides further that portions of each county lying outside of incorporations shall, by boundary lines designated by the State Board of Health, constitute primary registration districts.

In creating our districts we have followed the rule of adding to districts composed of incorporated towns and cities, such rural sections as lie convenient and adjacent to the incorporations.

We have further followed the rule in sparsely settled sections of the State of assigning, in some instances, as much as two or three townships not containing a commercial center, to some important commercial center of that particular county.

Missouri is subdivided into 114 counties and one city, the city of St. Louis, which occupies the status of a county. These 114 counties are subdivided into minor civil divisions, termed townships. There are some 1,280 townships in the State. There are in the State some 664 secondary divisions comprising 294 cities, 32 towns and 338 villages. These secondary divisions, practically in all instances, form part of the townships in which they are located, so it is readily seen that with the 1,150 Local Registrars we have almost one Local Registrar for each township in the State.

We are strongly of the opinion that small districts are essential to the satisfactory operations of the Vital Statistics law, and do not concur in the opinion of others, that in a mountainous or sparsely settled section of a State it is unnecessary to have small primary districts, and a consequent small number of registrars. But on the other hand, we believe small districts are essential in the satisfactory administration of the law. We believe that the number of registrars should be largely based on the area of the territory rather than upon the population.

#### OFFICE SUPPLIES.

Each and every detail in the equipment of a Bureau of Vital Statistics must be given thoughtful consideration. The character and printing of blanks and forms is worthy of careful thought.



A better impression is given one of the nicety of exactions, when it is observed that blanks and forms are well prepared and show some thought in their preparation.

Missouri, I believe, was the first to put into practical use the present standard death certificate.

A short time prior to having our forms printed I learned, through a press report, of the adoption of a new Standard Death Certificate. Upon writing to Dr. Cressy L. Wilbur, Chief of the Bureau of Vital Statistics at Washington, I was informed of the correctness of this report, and he furnished me with forms just off the press. These we followed, and as above mentioned, introduced them not only in our own State, but were the first State to use same.

With the State districted and the appointment of Local Registrars made, the placing in the hands of these officers of full sets of supplies, together with detailed statements as to their use, is the next step.

I do not know that Missouri excels any other state in the character of its printed forms and supplies for Local Registrars, but nevertheless we feel considerable pride in our printed matter. For your inspection, I here submit blanks and forms used by our Bureau. A pamphlet containing the law, together with full and complete instructions, consisting of an annotation of every section of the law, with a copy of the International Classification of the Causes of Death appended, is a publication that has served us most satisfactorily.

It has been our experience that certain Local Registrars and others called upon to comply to the law, have been unable to put a proper construction upon the various provisions of the statute. For this reason we have found it very necessary to publish instructions upon these questions somewhat at length.

Shortly after placing full sets of supplies in the hands of Local Registrars we began the publication of a circular letter. This was put out about every three or four weeks, dealing with the provisions of the law and informing the Local Registrars as to how progress was being made in the State with reference to its administration. We have felt that by thus keeping in close touch with the Local Registrars through frequent circularizing and letter writing, a greater interest in the workings or operations of the law was developed.

The installing of a law in a State does not constitute exclusively the carrying out of certain of the plain provisions of the law, but the scheme of securing perfect and complete reports is a necessary part of the law's installation as well as its operation.

For the first six months during the operation of the law, we were not overexacting in our demands for a close adherence to the Interna-



tional Classification of the Causes of Death and for uniform statements relative to the item "Occupation." We preferred first for the people and the officials to become thoroughly acquainted with the provisions of the law and certain of its plainer details and operations before insisting too strongly concerning the items above mentioned, but after some six months operation of the law, we then became very exacting with reference to the two data on death certificates, "Cause of Death" and "Occupation."

All certificates returned to the central office upon which the cause of death does not conform to the international classification, are copied upon supplementary blanks and returned to the Local Registrar in order that he may have the certificate perfected.

Rather than going into detail as to our method of obtaining this complete information, I prefer to pass among you forms that are being used for correcting certificates. The typewritten statements attached to these forms will readily explain their method of use.

#### PUBLICITY.

The successful administration of a Vital Statistics law in any State depends largely on the publicity given it. In our State the matter has been discussed at the County Medical Societies and in the State Medical Association, and the physicians are a unit in support of the law.

By giving frequent statistical compilations to the press, we have received the support of the newspapers of the State and the support of the various civic bodies which are naturally interested in matters of this character.

Our early experience in Missouri was to find a large per cent of the population of more than three and a quarter million, wholly unacquainted with the necessity and virtues of a Vital Statistics law.

People failed to understand why they could not continue to bury their dead as they had in the past, without furnishing to an officer, family and personal particulars leading to the obtaining of permission to make burial or other disposition of the body. They did not understand why the cause of death should be a matter of public interest.

With equal deficiency in understanding, people wondered as to why children could not be born as in the past without making the parentage and other data a matter of public record. The future value of such information was not realized.

It is true that three or four of our cities had, under municipal ordinances, such a law in operation. Outside of these cities and in the rural sections of the State, a good deal of ignorance concerning the necessity or worth of such a law existed. Naturally people were more or



less refractive in the matter of complying to this exacting statute which reached every family in the State. A feeling of rebellion was encountered in some communities, and in others compliance to the law was had with reluctance and no little protest.

Wherever we found an individual who was opposed to the law, from any cause, or who declined to observe it, we immediately wrote a personal letter to such a party. This resulted in a correspondence over the State consisting of from fifty to seventy-five personal letters per day for the period of a number of months.

I will say that the matter of personal letter writing, along such lines, has now ceased to exist because the necessity no longer prevails.

Early in the operation of the law we availed ourselves of the use of the public press. Papers published in the large cities and the small weekly papers of the counties were made use of. We had published short and pointed articles explaining the law and pointing out to the public its virtues.

We began early, and have since followed the plan of furnishing some five hundred weekly newspapers of the State a monthly statement concerning the births and deaths of the respective counties in which each paper is published. The births have simply been reported by number per county, while the deaths reported have been under twenty-four causes. Among the twenty-four causes, of course, being all of the infectious or contagious diseases.

By means of the public press we have been and are now furnishing information to people of all the counties of the State in order that they may have statistics that are of importance, and by studying these they are enabled to ascertain the prevalence of communicable diseases in a community. As a result, people are made to see many of the reasons for such a statute, and the public is stimulated to better control of contagious diseases and are caused to see the many legal purposes death and birth certificates afford.

As a result of our furnishing the newspapers of the State with this statistical information, upon request coming from us, these papers have placed our office upon the exchange list. We receive from four to five hundred papers weekly. From these papers clippings are made. These clippings are used for the purpose of checking the index, thus giving us information as to whether or not all births and deaths are being reported.

As stated in the early part of this paper, the law was installed in Missouri March, 1910. During the first complete year's operation of the law, or for the year 1911, we secured birth certificates to the number of 73,858, or 22.42 per thousand population. The total of deaths for this



same year was 43,390 or 13.17 per thousand population. The figures based upon the census of 1910.

From these figures it therefore seems that we are probably securing more than ninety per cent of the deaths, and I believe that nearly this same per cent of births are now being reported.

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\*Paper read by Dr. Frank B. Hiller, Secretary Missouri State Board of Health, at "International Congress on Hygiene and Demography," held in Washington, D. C., September 23-28, 1912.

### **ORGANIZATION OF "HEALTH DISTRICT SOCIETIES."**

Pursuant to announcement made in the January-March issue of the "Bulletin," "Health Districts" numbers one, two and three have been organized. The membership of these societies is made up of members of county boards of health, city health officials and Local Registrars. In addition to the above enumerated officials, which constitute the active membership, honorary membership is provided for all interested in the subjects of preventive medicine, sanitation, etc.

These societies are formed for the purpose of effecting a more complete correlation in the operations of State, county and municipal health officers and Local Registrars. An organization of these officials is not only accomplished, but at the meetings a program consisting of addresses and papers on public health questions is carried out.

Health District No. 1, made up of the counties of Crawford, Dent, Franklin, Iron, Jefferson, Lincoln, Montgomery, Phelps, St. Charles, St. Francois, Ste. Genevieve, St. Louis, Warren and Washington, was organized at the Southern Hotel in St. Louis June 26, 1912. Dr. G. A. Jordan, Assistant Health Commissioner of St. Louis, was elected president; Dr. J. C. Welsch, Local Registrar of Salem, vice-president, and Dr. James Stewart, supervisor of hygiene of the public schools of St. Louis, secretary.

The following papers were read at this meeting: "Difficulties Encountered in Establishing Quarantine in Rural Sections," by Dr. O. N. Schudde of Sullivan; "Medical Inspection of School Children," Dr. James Stewart of St. Louis.

A general discussion was had by all present, relative to the general purpose and scope of work of health district societies.

Health District No. 2, made up of the following named counties: Adair, Clark, Knox, Lewis, Macon, Marion, Monroe, Pike, Ralls, Randolph, Schuyler, Scotland and Shelby, was organized at the Mark Twain Hotel in Hannibal on July 16th. The following officers were elected: President, Dr. E. C. Callison, Kirksville; vice-president, Dr. W. B. Sisson, Kahoka; secretary, Mr. Fred D. Stichter, Louisiana.



The following papers were presented: "Value of Vital Statistics in Controlling Contagious Diseases," Dr. E. C. Callison, Kirksville; "What Physicians Gain from Vital Statistics," Dr. W. B. Sisson, Kahoka; "The Necessity of Adhering to the International Classification of the Causes of Death," Dr. H. J. Jurgens, Edina.

Health District Society No. 3 was organized at the Madison Hotel, in Jefferson City, July 31st. The following officers were elected: President, Dr. V. Q. Bonham, Fayette; secretary, Dr. A. W. Kampschmidt, Columbia.

Papers were read as follows: "Value of Vital Statistics from the Standpoint of Public Health," Dr. A. W. Kampschmidt, Columbia; "Difficulties Encountered in Establishing Quarantine in Rural Sections," Dr. W. C. Wessell, Hermann.

In the organization of the three above-named societies practically all counties in each district were represented.

The remaining four districts are to be organized by the middle of November. The State will then have been divided into seven districts, all thoroughly organized and with the officials residing therein working in better harmony and unison in the accomplishment of their duties along public health lines.

### **THE RELEASE OF DIPHTHERIA CASES.**

Diphtheria is one of the few diseases concerning which a definite statement may be made with regard to when the infecting organisms have left the body. This information is gained, as all know, by making cultures from the affected parts, namely, the mucous membranes of the nose and throat.

Although the present mortality from diphtheria is not to be compared with that existing before the general use of antitoxin, it still remains the most fatal epidemic disease of childhood. There were in the State during the year 1911, 650 deaths from diphtheria and "croup," giving a death rate per 100,000 of 19.7. Therefore any means at hand for controlling this disease should not be neglected. Such a means is the release from quarantine by cultures, and that this is neglected is shown by the fact that only 8 per cent of the diphtheria cultures examined at the State Laboratory during the present year have been release cultures.

Virulent diphtheria bacilli are always to be found for a short period after the disappearance of the membrane, and they occasionally persist for several weeks after the parts appear normal. Therefore, the only rational course would seem to be to require cultures to be made from all cases before raising the quarantine. This system is used in many of the



larger cities, and it is suggested that smaller towns adopt the plan also, using the State Laboratory for this purpose.

It has been found that where these release cultures are used, the average time of quarantine is no longer than where some definite period is set, say ten days or two weeks, after the disappearance of the membrane. In many cases the period of quarantine is shortened by this method. In this way the danger of too early a release is overcome, and it also serves to discover cases that would otherwise become bacillus carriers.

In requiring cultures for release, it is important to insist that two consecutive cultures be obtained, which may be taken twenty-four hours apart. Unless two such cultures are obtained a considerable number of cases will be released too early, it having been found that 20 per cent of second release cultures are positive after a previous negative. Another point to be insisted upon is the taking of a culture from the nose as well as from the pharynx.

The outfits supplied by the State Board of Health contain two sterile swabs, one of which is to be used for the nose, and the other for the throat. Both may be returned in the same tube. It is important that these outfits be used for this purpose, as improvised swabs may contain bacteria resembling the diphtheria bacillus. Outfits are obtainable from the county health officers, and also by addressing the State Bacteriologist at Jefferson City.

## **FORMALIN AND POTASSIUM PERMANGANATE DISINFECTION.**

### **DIRECTIONS FOR USE.**

Prepare the room so as to prevent any leakage of the gas. Be sure the air is moist, and it is well for it to be quite warm also. For every 1,000 cubic feet capacity provide two pints of formalin and thirteen ounces potassium permanganate. After the room is prepared procure a tin, agate or iron pail, holding not less than eight quarts, and place it in a large dish pan with two bricks under the pail and within the pan. Allow no fire or light in the room.

Place the *permanganate in the pail first*, and when all is ready, from a wide-mouthed bottle or a pitcher, quickly pour the formalin upon the crystals and quickly retreat from the room, closing the door promptly, and sealing it from the outside. The sealing should include the keyhole and the opening for the knob. Do not open the door for at least eight hours. Ventilate thoroughly and then close again, with several shallow vessels containing a little ammonia distributed through the apartment.

(PUBLIC HYGIENE, BLAIR.)



### JUNE EXAMINATION.

Examination for license to practice medicine and surgery was conducted in St. Louis June 24, 25 and 26, 1912. At this examination one hundred eighty-six applicants appeared; of this number one hundred fifty-eight passed and twenty-eight failed.

Below appears the names of the medical colleges represented, with an analysis of the result of the examination as it applies to colleges:

Colleges.	Number examined.	Number passed.	Number failed.	Per cent of failures.
American Medical College.....	24	16	8	33 $\frac{1}{3}$
*Barnes Medical College.....	5	3	2	40
*Chicago College of Medicine and Surgery..	2	2	0	0
Creighton Medical College.....	1	1	0	0
Ensworth Medical College.....	3	1	2	66 $\frac{2}{3}$
Hahnemann Medical, Kansas City.....	3	3	0	0
Jefferson Medical College.....	1	1	0	0
Johns Hopkins University.....	2	2	0	0
Kansas University.....	1	1	0	0
Kentucky School of Medicine.....	1	1	0	0
Long Island Hospital College.....	1	1	0	0
*Marion-Sims College of Medicine.....	1	1	0	0
Marquette University.....	1	1	0	0
Medico-Chirurgical, Philadelphia.....	1	1	0	0
Meharry Medical College.....	6	2	4	66 $\frac{2}{3}$
*Missouri Medical College.....	2	2	0	0
National Medical University.....	1	1	0	0
Northwestern University.....	2	2	0	0
Rush Medical College.....	1	1	0	0
St. Louis College of Physicians and Surgeons.	5	1	4	80
St. Louis University.....	54	54	0	0
University of Alabama.....	1	1	0	0
University of Arkansas.....	2	1	1	50
University of Edinburgh.....	1	1	0	0
University of Louisville.....	4	3	1	25
University Medical College, Kansas City...	15	11	4	26 $\frac{2}{3}$
University of Pennsylvania.....	1	1	0	0
Washington University.....	42	42	0	0
Wisconsin College of Physicians and Surgeons	1	1	0	0

\*Colleges extinct or merged.

### Births and Deaths (still births Not Included), by Counties and Cities, for Six Months, April to September, Inclusive, 1912.

The following table gives a comparison of the births and deaths by counties and important cities during the months, April to September, inclusive. There were 17,444 more births than deaths during this period. In some of the counties, it will be noted, that there are two, and sometimes three times as many births as deaths.

Ozark county shows the highest birth rate, which is 40.81 per 1,000, with Dunklin a close second, having a rate of 39.83 per 1,000. McDonald



county shows the lowest birth rate, which is 12.4 per 1,000. Of the three largest cities, St. Louis showed the highest birth rate, which is 21.09 per 1,000. Kansas City gives a rate of 19.84 and St. Joseph a rate of 16.82 per 1,000.

Camden county shows the lowest death rate, which is 4.48 per 1,000, while Butler shows a rate of 21.52, the highest in the State. St. Louis city has a rate of 13.67, Kansas City a rate of 15.75 and St. Joseph a rate of 12.97 per 1,000.

The above estimates are based upon the population as given in the census of 1910.

**Births and Deaths (still births Not Included), by Counties and Cities,  
for Six Months, April to September, Inclusive, 1912.**

County.	Births.	Deaths.	County.	Births.	Deaths.
Adair.....	231	87	Harrison.....	267	90
Andrew.....	142	64	Henry.....	286	125
Atchison.....	157	53	Hickory.....	104	24
Audrain.....	192	89	Holt.....	178	60
Barry.....	333	118	Howard.....	113	84
Barton.....	184	77	Howell.....	271	115
Bates.....	259	132	Iron.....	139	61
Benton.....	163	72	Jackson.....	309	196
Bollinger.....	230	49	Kansas City.....	2,465	1,957
Boone.....	324	153	Jasper.....	468	241
Buchanan.....	154	103	Joplin.....	353	219
St. Joseph.....	651	502	Webb City.....	180	100
Butler.....	370	222	Jefferson.....	317	164
Caldwell.....	197	75	Johnson.....	263	132
Callaway.....	237	158	Knox.....	103	45
Camden.....	123	26	Laclede.....	198	56
Cape Girardeau.....	387	164	Lafayette.....	340	146
Carroll.....	249	122	Lawrence.....	350	140
Carter.....	76	26	Lewis.....	115	71
Cass.....	265	106	Lincoln.....	221	95
Cedar.....	186	87	Linn.....	304	132
Chariton.....	271	104	Livingston.....	180	105
Christian.....	208	73	McDonald.....	84	55
Clark.....	111	48	Macon.....	294	130
Clay.....	188	163	Madison.....	155	56
Clinton.....	161	91	Maries.....	115	27
Cole.....	89	30	Marion.....	115	61
Jefferson City.....	84	101	Hannibal.....	192	117
Cooper.....	190	99	Mercer.....	156	37
Crawford.....	188	73	Miller.....	220	65
Dade.....	159	66	Mississippi.....	215	120
Dallas.....	168	31	Moniteau.....	150	61
Daviess.....	206	77	Monroe.....	154	80
DeKalb.....	134	47	Montgomery.....	135	79
Dent.....	183	56	Morgan.....	141	49
Douglas.....	242	44	New Madrid.....	323	149
Dunklin.....	604	299	Newton.....	377	151
Franklin.....	365	153	Nodaway.....	345	130
Gasconade.....	153	73	Oregon.....	213	72
Gentry.....	175	70	Osage.....	227	77
Greene.....	294	96	Ozark.....	244	52
Springfield.....	446	295	Pemiscot.....	316	186
Grundyl.....	197	81	Perry.....	186	67



County.	Births.	Deaths.	County.	Births.	Deaths.
Pettis.....	142	65	Saline.....	298	176
Sedalia.....	188	130	Schuyler.....	104	53
Phelps.....	156	96	Scotland.....	112	49
Pike.....	182	147	Scott.....	373	181
Platte.....	151	68	Shannon.....	203	60
Polk.....	284	62	Shelby.....	160	75
Pulaski.....	171	53	Stoddard.....	488	203
Putnam.....	178	54	Stone.....	171	43
Ralls.....	131	59	Sullivan.....	237	78
Randolph.....	187	100	Taney.....	138	47
Moberly.....	112	83	Texas.....	287	102
Ray.....	270	113	Vernon.....	305	187
Reynolds.....	134	33	Warren.....	88	39
Ripley.....	129	58	Washington.....	177	77
St. Charles.....	245	134	Wayne.....	230	83
St. Clair.....	175	83	Webster.....	231	96
St. Francois.....	495	201	Worth.....	85	21
Ste. Genevieve.....	116	57	Wright.....	237	74
St. Louis.....	702	643			
St. Louis city.....	7,246	4,698	Totals.....	37,139	19,695

### TOTAL BIRTHS AND DEATHS BY MONTHS.

The following table shows a comparison of the births and deaths for the first nine months of 1912. There were 24,311 more births than deaths during these months. The highest number of births was reported in January, which was 6,724, while the lowest number of births were reported in May, being 5,676.

The highest number of deaths reported was in March, being 4,249, while the lowest number reported was in June, being 2,775:

Month.	Births.	Deaths.
January.....	6,724	4,043
February.....	6,275	4,062
March.....	6,222	4,249
April.....	5,909	3,820
May.....	5,676	3,325
June.....	5,989	2,775
July.....	6,270	3,263
August.....	6,701	3,284
September.....	6,594	3,228
Totals.....	56,360	32,049

### BIRTHS BY SEX AND COLOR.

The following table shows the births by sex and color. There were 1,423 more males than females born in these months. Of the total number of births, which was 37,139, the males were 51.92 per cent and the females were 49.08 per cent of the total number.



The whites constituted 96.7 per cent of the total number of births, while the colored births were 3.27 per cent of the total number.

It is evident from these figures that the colored births are not being reported as they should be:

	April.	May.	June.	July.	August.	Sept.	Totals.
Male.....	3,113	2,893	3,045	3,263	3,519	3,448	19,281
Female.....	2,796	2,783	2,944	3,007	3,182	3,146	17,858
White.....	5,705	5,741	5,785	6,070	6,506	6,387	35,924
Black.....	204	205	204	199	195	206	1,213
Other colors.....				1		1	2

### IMPORTANT CAUSES OF DEATH BY MONTHS.

The following table gives the deaths by months, from April to September, 1912, inclusive, from the twenty-four important causes of death. A complete compilation is not obtainable at this time, as the cause of death was not complete on many of the certificates. These will be corrected and properly classified at an early date.

The report for the six months, April to September, inclusive, shows a total of 19,695, or an annual rate of 11.96 per 1,000. The death rate for the year 1911 was 13.17 per 1,000. The decrease is due to the fact that these months are the healthiest months of the year.

The report of the first three months of the year 1912 shows there were 12,354 deaths in the State, making a total of 32,049 deaths for the months of January to September, inclusive, or a death rate of 12.98 per 1,000. The deaths during the months of October to December, inclusive, will increase this rate equal to or above the rate of 13.17 per 1,000 of the year 1911:

	Total.	April.	May.	June.	July.	Aug.	Sept.
Typhoid fever.....	360	35	30	33	53	89	120
Smallpox.....	10	1	1	.....	7	1	.....
Measles.....	25	5	5	5	6	3	1
Scarlet fever.....	50	15	15	9	4	4	3
Whooping cough.....	228	48	51	43	42	30	14
Diphtheria and croup.....	144	31	11	17	17	23	45
Influenza.....	109	64	26	3	9	2	5
Tuberculosis of the lungs.....	2,121	467	388	344	334	319	269
Other forms of tuberculosis.....	374	81	64	52	65	63	49
Cancer.....	1,064	175	192	155	190	177	175
Diabetes.....	173	27	28	25	28	35	30
Epidemic cerebrospinal meningitis.....	279	157	64	19	18	10	11
Acute anterior poliomyelitis.....	37	2	6	5	5	9	10
Other diseases of the nervous system..	1,099	222	190	169	174	188	156
Diseases of heart and circulatory system.....	2,556	513	511	400	391	366	375
Pneumonia, bronchopneumonia.....	1,008	453	203	123	73	79	77



	Totals.	April.	May.	June.	July.	Aug.	Sept.
Other diseases of respiratory system...	385	111	78	53	44	44	55
Diarrhea and enteritis (under two years of age).....	1,175	59	56	82	337	325	316
Acute nephritis and bright's disease...	1,413	242	236	215	238	235	247
The puerperal state.....	242	45	51	37	41	29	39
Accidents.....	1,134	170	195	206	191	182	190
Suicides.....	374	63	78	66	59	54	54
Homicides.....	134	21	17	24	30	20	22
Other causes.....	5,206	813	834	690	907	997	965
Totals.....	19,695	3,820	3,325	2,775	3,263	3,284	3,228

**SUMMARY CONCERNING CERTAIN IMPORTANT CAUSES OF  
DEATH AS SHOWN IN THE SUCCEEDING TABLE OF  
DEATHS FROM APRIL TO SEPTEMBER, 1912,  
INCLUSIVE.**

**TYPHOID FEVER.**

Typhoid fever resulted in 360 deaths during the months of April to September, or a death rate of 10.93 per 100,000. It is noted that one-third of these deaths, or 120, occurred in September. In 1909, the death rate in the national registration area was 22 per 100,000. Since 1900, when the first annual reports were issued, the death rate from typhoid has shown a marked decrease.

**TUBERCULOSIS (ALL FORMS).**

During the months, April to September, 1912, there were 2,121 deaths from tuberculosis of the lungs and 374 from other forms of tuberculosis, making a total of 2,495, or a rate per 100,000 of 151.53. In other words, 12.66 per cent of all deaths were caused from this disease. This is slightly above the death rate of 1911, which shows tuberculosis caused approximately 11.8 per cent of all deaths. The total number of deaths in 1911 from this disease was 5,113. Missouri shows a death rate from this disease considerably lower than the registration area, which shows a rate of 167.5 per 100,000 population in 1909.

**ENTERITIS (UNDER 2 YEARS OF AGE).**

Enteritis of children under 2 years of age resulted in 1,175 deaths during the months, April to September, inclusive, of which 978 occurred during July, August and September. The death rate per 100,000 was 71.34. This is lower than the death rate in the national registration area, which was 107.7 per 100,000. The rate for the year will not be as high as given above because the fall and winter months show a marked decrease in deaths from this disease.



## DISEASES OF HEART AND CIRCULATORY SYSTEM.

The diseases of the heart and circulatory system caused more deaths than any other disease during the six months, as shown in preceding table, resulting in 2,526 deaths, or a rate of 155.24 per 100,000 population. "Heart failure" is not included in this title as it is not accepted as a satisfactory cause of death. Many terms of an indefinite character are here included, such as "organic heart disease," or "heart trouble," which probably should be classified under some other disease, if the true cause had been given.

## ACUTE NEPHRITIS AND BRIGHT'S DISEASE.

During the six months shown in the report, there were 1,413 deaths from acute nephritis and Bright's disease, a death rate of 85.82 per 100,000. The average age of persons dying from acute nephritis is about 38 years, and from chronic Bright's disease, the average age is 58, showing it is a degenerative disease. Many deaths from acute nephritis, no doubt, should properly be chargeable to an acute infectious disease. In all but two of the states having the registration of deaths, the deaths from this disease showed a marked increase.

## CANCER.

It will be a surprise to know there were 1,064 deaths from cancer during the six months shown in the report, or a rate of 64.62 per 100,000 population. As far as can be learned from statistics compiled by the Bureau of the Census, the death rate from cancer is on the increase, having risen from 74 in 1908 to 77 per 100,000 in 1909.

This increase cannot be accounted for unless the physicians are giving a more accurate statement of the cause of death, or the saving of lives from tuberculosis and other preventable diseases of early or middle life would leave more persons subject to cancer at the cancer age, as it is a known fact that this disease is more prevalent after the age of 40 years has been reached.

## ACCIDENTS.

There were 1,134 deaths from accidents during the months, April to September, 1912, inclusive, or a rate of 68.86 per 100,000 population. Among the causes of accidental deaths were the following, in the order of numerical importance: Railroad accidents and injuries, drowning, scalds and burns, injuries by horses and vehicles, street cars and automobiles, mines and quarries, etc. It is important that the means of injury be specified in all returns of death from accidental causes.



**Births and Deaths Reported in Missouri (Stillbirths Not Included) During the Six Months Ending September 30, 1912.**

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age)	Bright's Disease.....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Adair—</b>	22,700																												
April.....		39	15								3		1					1	1										4
May.....		46	15						1				3				4	1											1
June.....		30	8								1	1																	3
July.....		38	11	1									1				2			2									3
August.....		42	16	1							2						1			1									3
September.....		36	22	2					2								2	3		4									7
Totals.....		231	87																										
<b>Andrew—</b>	15,282																												
April.....		23	6								1		1									2	1						1
May.....		18	15										4																3
June.....		24	6																			1	1						1
July.....		28	7								1		2				1	2		1			1						2
August.....		28	12								1	1	1									1							4
September.....		21	18	1							1	1	1				1	5	1	3									5
Totals.....		142	64																										
<b>Atchison—</b>	13,604																												
April.....		29	22	1					1	2		1	3				1	1	7				1		2				2
May.....		33	10										1										1						2
June.....		27	2																										
July.....		23	6															3											2
August.....		26	7														1												3
September.....		19	6														1	1	1	1									2
Totals.....		157	53																										







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total b i r t h s during the six months.....	Total d e a t h s during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis o f t h e Lungs.....	Other forms of Tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Broncho- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).....	A c u t e Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Bollinger—</b>	14,576																											
April.....		33	15					1		1							1	2	1		1						5	
May.....		43	9														1	4									3	
June.....		37	6							1		1							1								2	
July.....		32	3							1										1							1	
August.....		39	9														1			1							6	
September.....		46	7														1			3							2	
Totals.....		230	49																									
<b>Boone—</b>	30,533																											
April.....		42	29							3	4	2	2			2	2	5	1								9	
May.....		49	34	1						2	6	1	2				5	2	2		3						7	
June.....		47	23														2	1									2	
July.....		52	22				1										3	3	2		1						5	
August.....		53	20							1	2		1				3	2	1		1						7	
September.....		81	25	1						1	4		1				2	2	3	1							10	
Totals.....		324	153																									
<b>Buchanan (outside St. Joseph)—</b>	15,517																											
April.....		28	17					2					2			2	3	3		3							4	
May.....		22	17														1	1									3	
June.....		27	19								1		2				3	1	1								3	
July.....		23	16					1					1				1	1									3	
August.....		31	15														4										3	
September.....		23	19								2					1	2	1		2							3	
Totals.....		154	103																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Cape Girardeau—</b>	27,621																											
April.....		60	41				1		1	1	6	1	1		2			6	8	2	1	3					9	
May.....		66	25							2	4							2		1	3						8	
June.....		56	17					1			2							1	1	1							8	
July.....		56	28	1							2		2					2	3	3	1						16	
August.....		86	30	2							3							3	3	1	3						15	
September.....		63	23	4							3		1					1		6							4	
Totals.....		387	164																									
<b>Carroll—</b>	23,098																											
April.....		37	42							3	5	1	3		2		2	6	6	1	1	2					8	
May.....		39	19	1				1			2		2				4				1	1					3	
June.....		36	13								1		1				1				1	1					5	
July.....		47	15								1		2				3	2	1		1						3	
August.....		49	12								2							3									3	
September.....		41	21							1	3	1	2					2	2	2	1						7	
Totals.....		249	122																									
<b>Carter—</b>	5,504																											
April.....		22	5														2		1					1			2	
May.....		13	4																								1	
June.....		10	1																									
July.....		13	6	1							1																4	
August.....		8	6	1							1							1									1	
September.....		10	4									1								1							2	
Totals.....		76	26																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total b irths during the six months.....	Total deaths during the six months.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
<b>Clay—</b>	<b>20,302</b>																												
April.....		37	33							1	4		1		3		3	5	1		2		9					2	
May.....		24	27	1			1				1		2	1		1	1	9	1			1	1					5	
June.....		15	28	2							1	1	2	1			1	4	4				6					8	
July.....		44	28								1	1	1		1		1	4	1			6	1					5	
August.....		29	26	1							4		1				1	5	1			2	3						
September.....		39	21	2							1	1	1	1									1						
Totals.....		188	163																										
<b>Clinton—</b>	<b>15,297</b>																												
April.....		29	20								4	1	1		4		1	3	2				1					3	
May.....		20	21								2	1	3		2		1	2	1		1	2						4	
June.....		25	16					1			1		2				3	1				4						4	
July.....		30	11								1		3				3	3				2		1				1	
August.....		24	10	1							1		1				2	1	1		1	1						1	
September.....		33	13								1	1	1					1			3							5	
Totals.....		161	91																										
<b>Cole (outside Jefferson City)—</b>	<b>10,107</b>																												
April.....		12	7							1	4						1											1	
May.....		15	6															1										4	
June.....		15	4										1						1				1					1	
July.....		16	7								1		2				1											3	
August.....		11	2									1																	
September.....		20	4										1					1										2	
Totals.....		89	30																										



Jefferson City—		11,850																	
April	29	17							1	1					4		2		4
May	6	15									2				3			2	
June	11	13							2	1					1				3
July	11	24		1					4		4			1	2	1	1	1	8
August	14	15							2		1				1				6
September	13	17	2						2		1				2			3	5
Totals	84	101									1								
Cooper—		20,311																	
April	25	20							3	1	2	1	2		1	4	2		2
May	33	16							1				1		2	2		1	5
June	22	13	1						1	1	1				4		1		3
July	33	15									1	1						1	3
August	39	16							2		1				3			6	5
September	38	19	1								2			1	1	3	1	1	5
Totals	190	99													2	2	1		
Crawford—		13,576																	
April	22	13				1			1	1					1	4	1	1	3
May	21	15							5			1				3	1		2
June	30	12							1									1	4
July	39	14	1			1					1	1			4	2		1	6
August	35	9													1	2			4
September	41	10				1					1				1	2		3	2
Totals	188	73																	8
Dade—		15,613																	
April	24	14				3		1	1				1		1	1	4	1	1
May	40	13							1		1	1	1		3	1	1	1	4
June	33	7													2				1
July	16	17					1		1						1	3		2	6
August	21	6	1								1	1				3		1	2
September	25	9								2	1						1		5
Totals	159	66																	
Dallas—		13,181																	
April	17	6					1								1	1	1		2
May	23	2													1	1			1
June	56	4										1							1
July	3	16															1		1
August	29	13	1				1	1							1	3		1	1
September	27	3													1				2
Totals	168	31																	



**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Davless—</b>	17,605																											
April.....		34	21	1					1	1	3						1	2	1			2						7
May.....		32	19							4		2					4	1				2						3
June.....		25	7						1								1	1				1						2
July.....		38	9							2							1	1										3
August.....		34	10														1	1										6
September.....		43	11									2					1	1		1								3
Totals.....		206	77																									
<b>DeKalb—</b>	12,531																											
April.....		24	3															2										1
May.....		31	13	1														4	1				1					2
June.....		14	8															2				1						3
July.....		23	9															1				2						1
August.....		14	3									4	1					2										1
September.....		28	11															5		1								4
Totals.....		134	47																									
<b>Dent—</b>	13,245																											
April.....		37	20	1						2	3		2				1	1	2									6
May.....		20	7						1																			5
June.....		32	3															1					1					2
July.....		33	7																									3
August.....		23	13								3																	7
September.....		38	6															1		2								5
Totals.....		183	56																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Greene</b> (outside Springfield)—	28,630																											
April.....		37	23						1		5			1		1		1	3			1		3				5
May.....		46	16	2					1			1					1				2						5	
June.....		47	13	1					2			1					2				1						5	
July.....		54	22	1							2					1		2			1						11	
August.....		47	10	1		1					1												1				3	
September.....		63	12	1								1					1			2			3				2	
Totals.....		294	96																									
<b>Springfield</b> —	35,201																											
April.....		60	56								6	2	3				1	12	7	2	1	4		3			11	
May.....		74	51								4	1	3		4		1	10	6	2	3	4		2		12		
June.....		82	47								6	4	4		1		2	6	2	2	3	1	2			17		
July.....		35	39	4							2		3		2		2	4	4	1	2	3	1	4		10		
August.....		80	61	6				1			2		3		1	1	2	7	8	3	3	5	3			17		
September.....		115	41	5							4	2	1				3	3	10									
Totals.....		446	295																									
<b>Grundy</b> —	16,744																											
April.....		27	15		1						2		1	3			1	3	3								4	
May.....		37	19									1	3				1	3	2		2					4		
June.....		32	12								1		3				1	2	1							1		
July.....		34	10									1	1				1	1								2		
August.....		27	13								3		1							1							1	
September.....		40	12	1								1	1				1	3		2							7	
Totals.....		197	81																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

County.	Population.....	Total b irth s during the six months.....	Total d eath s during the six months.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory System.....	Diarrhoea and Enteritis (under 2 yrs. of age).....	Brigitis Disease.....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Howell—</b>	21,065																												
April.....		49	17	1	1	1	1	1	1	1	1	1	2	1	1	2	2	3	2	1	1	2	1	1	3	1	1	1	5
May.....		51	25	1	1	1	1	1	1	1	1	1	2	1	1	1	1	4	1	1	1	2	1	1	2	1	1	1	6
June.....		38	16	1	1	1	1	1	1	1	1	1	2	1	1	1	1	4	1	1	1	1	1	1	1	1	1	1	5
July.....		35	16	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	3	1	1	1	1	1	1	1	1	5
August.....		54	20	1	1	1	1	1	1	1	1	1	1	1	1	2	4	3	2	3	1	1	1	1	1	1	1	1	7
September.....		44	21	6	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	7
Totals.....		271	115	11	6	6	6	6	6	6	6	6	12	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
<b>Iron—</b>	8,563																												
April.....		25	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	2	1	1	1	1	1	1	1	8
May.....		21	6	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	3
June.....		21	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4
July.....		28	10	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	4
August.....		25	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
September.....		19	10	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Totals.....		139	61	11	6	6	6	6	6	6	6	6	12	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
<b>Jackson (outside Kansas City)—</b>	35,141																												
April.....		72	34	1	1	1	1	1	1	1	1	1	1	2	1	1	5	6	6	1	1	1	2	1	1	1	1	1	10
May.....		44	33	1	1	1	1	1	1	1	1	1	1	2	1	1	1	7	1	2	1	1	1	1	1	1	1	1	9
June.....		55	34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8	2	2	1	1	1	1	1	1	1	1	9
July.....		30	42	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	1	1	2	2	2	2	2	1	1	1	11
August.....		56	36	2	1	1	1	1	1	1	1	1	1	1	1	1	4	9	1	2	3	3	3	3	2	1	1	1	6
September.....		52	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	4
Totals.....		309	196	11	6	6	6	6	6	6	6	6	12	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

County.	Population.	Total b i r t h s during the six months . . . . .	Total d e a t h s during the six months . . . . .	Important causes of death.																									
				Typhoid Fever. . . . .	Smallpox . . . . .	Measles . . . . .	Scarlet fever. . . . .	Whooping Cough. . . . .	Diphtheria and Croup . . . . .	Influenza. . . . .	Tuberculosis of the lungs . . . . .	Other forms of Tuberculosis . . . . .	Cancer. . . . .	Diabetes. . . . .	Epidemic Cerebrospinal Meningitis. . . . .	Acute Anterior Poliomyelitis. . . . .	Other diseases of the nervous system. . . . .	Diseases of heart and circulatory system. . . . .	Pneumonia, Bronchopneumonia. . . . .	Other diseases of respiratory system. . . . .	Diarrhoea and Enteritis (under 2 yrs. of age). . . . .	Acute Nephritis and Bright's Disease. . . . .	The puerperal state. . . . .	Accidents . . . . .	Suicides . . . . .	Homicides . . . . .	Other causes. . . . .		
Johnson—	26,297																												
	April. . . . .	38	26							4	3	1	1			3	6	4				1					2		
	May . . . . .	44	16							1	1	3		1		3	7	1		1	1	1				4			
	June . . . . .	37	25							2		2				3	4	1				4	3			5			
	July . . . . .	53	21						1	1	2					3	4	1	1		2	1				5			
	August. . . . .	47	32	1						3	2	1	1			4	5	1		2	1					10			
	September. . . . .	44	12									1				1	2									5			
Totals. . . . .	263	132																											
Knox—	12,403																												
	April. . . . .	14	13	1						1						1	2	1		2			1			5			
	May . . . . .	15	10									2				1	1					1				5			
	June . . . . .	14	5									1				1	1			1						1			
	July . . . . .	16	6	1						1		1				1	1			1						2			
	August. . . . .	24	6									1	1			1	1									1			
	September. . . . .	20	5													1	1		1							3			
Totals. . . . .	103	45																											
Laclede—	17,363																												
	April. . . . .	34	14					1		3	1			1		1	1		1							3			
	May . . . . .	43	7					1		1						1	2			1		1				2			
	June . . . . .	33	9								2						1									1			
	July . . . . .	31	5														2			1						1			
	August. . . . .	21	9							3			1				2									3			
	September. . . . .	36	12	1						1						1	1		1	2						4			
Totals. . . . .	198	56																											







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total b irths during the six months .....	Total deaths during the six months .....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
<b>Livingston—</b>	19,453																												
April.....	36	20	1							1	1					4	4	3				1			1			3	
May.....	32	14										1				2	2	2				1					2		
June.....	25	15										1				2	2	2				1					2		
July.....	29	22						1	1		3					1	1				1						5		
August.....	30	17									2					1	1				1						6		
September.....	28	17														1	2	1			1						7		
Totals.....		180	105																										
<b>McDonald—</b>	13,539																												
April.....	8	3									2						2	1							1		2		
May.....	11	9						2				1										1					5		
June.....	17	17				1		1	1		3					1	3	1									4		
July.....	8	8								1	1						1	1	1								4		
August.....	22	10									3					1	2				1						3		
September.....	18	8	1														2	2			1			1			2		
Totals.....		84	55																										
<b>Macon—</b>	30,868																												
April.....	42	31								1	4		3			5	5	4									6		
May.....	37	27						2			4		2			2	7	1				1		1			6		
June.....	73	19						1			2		3			1	3										7		
July.....	50	15									3					2											4		
August.....	53	18									2					1					2						6		
September.....	39	20	1										3			2	3				3						7		
Totals.....		294	130																										







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the six months .....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Miller—</b>	16,717																											
April.....		44	16	1				1		4			2				1	1	1		1	2	1				1	
May.....		19	3							1							1	1	1		1						2	
June.....		35	13														1	1		1	1						2	
July.....		33	4														1	1	1								4	
August.....		40	12					1		1		2				1				1	1						2	
September.....		49	17	1					1	1						1				4							2	
Totals.....		220	65																									
<b>Mississippi—</b>	14,557																											
April.....		42	18					2		3						1		7	2		1						3	
May.....		34	23	1			1			2		2				1	1	1	1		1	4				1	7	
June.....		26	15	2												1	1	1	2		5						6	
July.....		37	21	1						1	1					1	2			5	1	1					8	
August.....		44	19	3						1						1				3	1						10	
September.....		32	24	2				1		2		1						2		3	1	1					12	
Totals.....		215	120																									
<b>Moniteau—</b>	14,375																											
April.....		24	8	1								2				2		1	1		2						3	
May.....		23	7							1						1		1			1						2	
June.....		18	7													1					2						6	
July.....		30	13							2										1	1	1					5	
August.....		33	15							4	1		1							1	1						6	
September.....		22	11							2		1				2		1		1	3						5	
Totals.....		150	61																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Nodaway—</b>	28,833																											
April.....		59	24										1		2		2		6	1	2	2		1			5	
May.....		56	21									1	2					1	1	3	2					2		
June.....		45	10										4				1	1	1							3		
July.....		54	14														2	1	1							2		
August.....		68	33					1				2	2				3		5		2					11		
September.....		63	28	1													1									6		
Totals.....		345	130																									
<b>Oregon—</b>	14,681																											
April.....		34	19					1				1	1					1	1	1	2		2	1		8		
May.....		47	11	1													1	1	2							5		
June.....		27	13						1			1	1					3		1						3		
July.....		34	7									1								1	2					3		
August.....		36	14										1				2			2					1	7		
September.....		35	8									2								1						3		
Totals.....		213	72																									
<b>Osage—</b>	14,283																											
April.....		45	23	2						1	1	1	2	1		1		4	1	1	1	3		1		5		
May.....		24	12						1						2									1		2		
June.....		39	11																1							2		
July.....		39	11	1					1			1						2								3		
August.....		25	7																							6		
September.....		55	13	2								1								1						7		
Totals.....		227	77																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.	Total births during the six months.	Total deaths during the six months.	Important causes of death.																									
				Typhoid Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Tuberculosis of the lungs.	Other forms of Tuberculosis.	Cancer.	Diabetes.	Epidemic Cerebrospinal Meningitis.	Acute Anterior Poliomyelitis.	Other diseases of the nervous system.	Diseases of heart and circulatory system.	Pneumonia, Bronchopneumonia.	Other diseases of respiratory system.	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.	The puerperal state.	Accidents.	Suicides.	Homicides.	Other causes.		
<b>Phelps—</b>	15,796																												
April.		17	25				1				2	1	2				2	1	2				6				1	4	
May.		21	18						1			2					2	2	2			1	1		3			4	
June.		30	14								2						1	2	2									6	
July.		20	9								2						1	1	1						1			3	
August.		35	18								1	1	1					2	2		5		3					2	
September.		33	12						2		2																	6	
Totals.		156	96																										
<b>Pike—</b>	22,556																												
April.		27	32							2	3						2	4	4	5	1		1	1	1	1		11	
May.		27	29								4	2	1					4	4	4		2	1	3	3	1		3	
June.		39	21								3			1			1	4	3	2	2	2	2	3				5	
July.		24	25							1	3			1				3	3	2	1		2	3				8	
August.		38	22								4		1				2	2	2		5							5	
September.		27	18								1		3					4						2				8	
Totals.		182	147																										
<b>Platte—</b>	14,429																												
April.		25	5	1					1		1							1	3			1						2	
May.		14	10								1		1						3			2			1			3	
June.		23	16	1							1							3	3						1			6	
July.		23	16		1						1							2	1		1				1			3	
August.		33	10						1				1					2	2									6	
September.		33	11						1		1	1					1	1			1			3				1	
Totals.		151	68																										







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.**

Counties.	Population, 1910.....	Total b i r t h s during the six months.....	Total d e a t h s during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of t h e lungs.....	Other forms of Tubercu- lost.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronch-o- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Bright's Disease.....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....
<b>Moberly—</b>	10,923																											
April.....		12	14						1	3	1	2	1			1				1	1							2
May.....		29	16	1						2	1	1					1				4							2
June.....		13	16							4	2						1				1							3
July.....		9	9	1						1	1	1							2		1							3
August.....		19	15	1						1	1	1					1			3	2							4
September.....		26	13	3							1	1	1				2											1
Totals.....		112	83																									
<b>Ray—</b>	21,451																											
April.....		61	22					1	1	1	2	2	2		2		6				4	1						3
May.....		40	27						1	4	1	2	2		2		4											8
June.....		29	19	1	1						1	1	1		2		1											4
July.....		46	12	1				1		2	1	1	1						1	1								5
August.....		48	14								1	1																2
September.....		46	19	1				1		2	1	2			1		2		1	1						1		6
Totals.....		270	113																									
<b>Reynolds—</b>	9,592																											
April.....		21	11					1	1	1								1		1		1						5
May.....		34	3																									1
June.....		22	3																									
July.....		14	7							1																		2
August.....		24	7	1							1																	3
September.....		19	2														1			2								1
Totals.....		134	33																									







BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
<b>St. Louis—</b>	82,417																												
April.....		99	121				1	3			51	1	7	1	1		4	10	7	4	2	2	1	6	1	1	20		
May.....		110	94	1			2				32	2	4				6	11	5	2	1	2		5			12		
June.....		99	90					1			32	1	3				3	14	14	3	1	1		3			16		
July.....		113	126					2		1	50	3	5				3	10	9	4	2	1		7			12		
August.....		132	118					4			47	1	1				9	7	2	1	2	15		6			14		
September.....		149	94	2					4		24	1	2		2	2	2	7	2	2	2	12	1	2	2		21		
Totals.....		702	643																										
<b>Saline—</b>	29,448																												
April.....		48	37					2			3		5		1		5	6	4		2	3		1	1		4		
May.....		42	29								2						3	10				1					5		
June.....		64	36								2	1	3			2	4	5	1	2		1		3			5		
July.....		57	20			1					3		2				3	3		2		1		1	1		6		
August.....		55	19								3			1			3	1		2		1		1			6		
September.....		32	35	1				1	1		2	1	4			2	2	2			1	1	3				14		
Totals.....		298	176																										
<b>Schuyler—</b>	9,062																												
April.....		16	7	1							2							1	1					1			3		
May.....		10	9																								3		
June.....		22	11								1		2		1		2			1			1				2		
July.....		20	4	1																									
August.....		16	12										1				1					1					3		
September.....		20	10	1									1				1	1			2	2					3		
Totals.....		104	53																										







BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER 30, 1912—Continued.

Counties.	Population, 1910.....	Total births during the six months.....	Total deaths during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Stone—</b>	11,559																											
April.....		34	5								1				1					1								2
May.....		40	8						1																			4
June.....		29	6																									1
July.....		21	4											1									1					1
August.....		23	11						1											1								4
September.....		24	9	3								1								1					1			3
Totals.....		171	43																									
<b>Sullivan—</b>	18,598																											
April.....		29	14								1			2					1									6
May.....		32	15			1							1	1				1	1									4
June.....		45	12								1		2	2				1	1									2
July.....		45	14							1								1										5
August.....		49	15										2	1				3										5
September.....		37	8											1											1			7
Totals.....		237	78																									
<b>Taney—</b>	9,134																											
April.....		25	10						1									1							1			5
May.....		21	6											1									1					2
June.....		19	11	1															1									7
July.....		33	6								1																	2
August.....		19	5																	1								1
September.....		21	9						1		1									1						1		4
Totals.....		138	47																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE SIX MONTHS ENDING SEPTEMBER  
30, 1912.—Continued.**

Counties.	Population, 1910.....	Total b i r t h s during the six months.....	Total d e a t h s during the six months.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis o f t h e lungs.....	Other forms of Tubercu- losis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomy- elitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronch-o- pneumonia.....	Other diseases of respira- tory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Webster—</b>	17,377																											
April.....		28	21								3		3				1	3	5	1		1						4
May.....		42	15										1						1			1						5
June.....		38	11																1									6
July.....		38	9															1										5
August.....		45	21	2							2	1	2				1	2		1	1							8
September.....		40	19	2					2		2		1					3										9
Totals.....		231	96																									
<b>Worth—</b>	8,007																											
April.....		10	5								1							1		1								1
May.....		18	1																			1						
June.....		16	4								1							1										1
July.....		16	2										1				1	1	1									
August.....		13	3															2										
September.....		12	6									1	1					1		2								1
Totals.....		85	21																									
<b>Wright—</b>	18,315																											
April.....		36	12								3	1	1						2	1	2							2
May.....		43	12								3					2												5
June.....		43	9	1													1	1	2	1	1							3
July.....		43	15								4	1	1	1			2											2
August.....		34	15	1							2						1	1		1	1							5
September.....		38	11						1		1						1			2		1						3
Totals.....		237	74																									



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## BACTERIOLOGICAL LABORATORY.

TABLE I.

TOTAL EXAMINATIONS FOR SIX MONTHS, APRIL TO SEPTEMBER.

	Tuberculosis (sputum) . . . . .	Typhoid . . . . .	Diphtheria . . . . .	Malaria . . . . .	Rabies . . . . .	Gonorrhea . . . . .	Water . . . . .	Tuberculosis (not sputum) . . . . .	Miscellaneous . . . . .	Urine . . . . .	Tissues . . . . .	Totals . . . . .
April . . . . .	190	34	16	4	2	16	18	8	26	52	14	380
May . . . . .	192	51	10	6	2	13	56	14	28	*54	*8	434
June . . . . .	156	47	6	9	2	9	52	9	12	...	...	302
July . . . . .	157	79	6	11	...	11	73	11	16	...	...	364
August . . . . .	145	121	8	18	...	6	109	12	13	...	...	432
September . . . . .	107	115	21	11	...	10	55	4	10	...	...	333
Totals . . . . .	947	447	67	59	6	65	363	58	105	106	22	.....
Grand total . . . . .												2,245

\*The routine examination of urine and tissues was discontinued June first.

This represents a gain of 441 examinations over the previous six months, and an increase of 1,040 examinations in the corresponding period of 1911.

TABLE II.

TUBERCULOSIS—RESULT OF TESTS.

	Positive.	Negative.	Per cent positive.
April . . . . .	57	133	30
May . . . . .	55	137	28.6
June . . . . .	50	106	32
July . . . . .	44	113	28
August . . . . .	51	94	35.1
September . . . . .	39	68	36.4
Totals . . . . .	296	651	31.2

TABLE III.

TYPHOID—RESULT OF TESTS.

	Positive.	Negative.	Per cent positive.
April . . . . .	9	25	26.4
May . . . . .	5	46	9.8
June . . . . .	9	38	19.1
July . . . . .	13	66	16.4
August . . . . .	34	87	28.1
September . . . . .	47	68	40.8
Totals . . . . .	117	330	26.1



THE FOLLOWING TABLE IS ADAPTED FROM A CHART  
SHOWN AT THE STATE FAIR.

STATE BOARD OF HEALTH.

BACTERIOLOGICAL LABORATORY.

NUMBER OF SPECIMENS RECEIVED FROM EACH COUNTY,  
SEPTEMBER 1, 1911, TO SEPTEMBER 1, 1912.

County.	Number	County.	Number
Cole.....	820	Macon.....	22
Franklin.....	105	Linn.....	21
Greene.....	89	Morgan.....	21
Pettis.....	80	Saline.....	21
St. Francois.....	77	Christian.....	20
Howell.....	65	Daviess.....	20
Dunklin.....	64	Gasconade.....	20
Cape Girardeau.....	63	Reynolds.....	20
Jasper.....	60	Schuyler.....	20
Miller.....	59	St. Clair.....	20
Howard.....	59	Sullivan.....	20
Jackson.....	58	Cooper.....	18
Bates.....	57	Harrison.....	18
Cass.....	55	Andrew.....	17
Moniteau.....	53	Knox.....	17
Monroe.....	51	Maries.....	17
Shelby.....	49	Putnam.....	17
Johnson.....	48	DeKalb.....	16
Vernon.....	45	Douglas.....	16
Livingston.....	43	Marion.....	16
Lafayette.....	42	Gentry.....	15
Perry.....	40	Pike.....	15
Buchanan.....	39	Dallas.....	14
Ray.....	39	Nodaway.....	14
Audrain.....	39	Atchison.....	13
Lawrence.....	37	Clark.....	13
Platte.....	37	Mississippi.....	13
Scott.....	37	Dent.....	12
Barton.....	35	Montgomery.....	12
Newton.....	34	Webster.....	12
Cedar.....	33	Clinton.....	10
Stoddard.....	31	Butler.....	9
Polk.....	30	Jefferson.....	9
Randolph.....	30	Laclede.....	9
Boone.....	29	McDonald.....	9
Henry.....	29	Mercer.....	9
Chariton.....	28	St. Charles.....	9
Lewis.....	27	Taney.....	9
New Madrid.....	27	Clay.....	8
Barry.....	26	Phelps.....	8
Benton.....	26	Bollinger.....	7
Callaway.....	26	Shannon.....	7
Wayne.....	26	Warren.....	7
St. Louis.....	25	Wright.....	7
Crawford.....	24	Iron.....	6
Carroll.....	23	Madison.....	6
Dade.....	23	Osage.....	5
Lincoln.....	23	Scotland.....	5
Ripley.....	23	Caldwell.....	4
Grundy.....	22	Pulaski.....	4



## NUMBER OF SPECIMENS RECEIVED FROM EACH COUNTY—Continued.

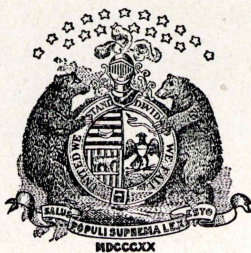
County.	Number	County.	Number
Camden.....	3	Texas.....	2
Holt.....	3	Carter.....	1
Ste. Genevieve.....	3	Oregon.....	1
Stone.....	3	Ralls.....	1
Washington.....	3	Worth.....	1
Adair.....	2	Hickory.....	0
Pemiscot.....	2	Ozark.....	0

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# MISSOURI STATE BOARD OF HEALTH

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## QUARTERLY BULLETIN

NEW SERIES

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VOL. 2

OCTOBER-DECEMBER, 1912

NO. 4

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Dr. L. E. Bunte.....	St. Louis		
Dr. Murray C. Stone, State Bacteriologist,	Jefferson City.		
W. E. Crampton, Statistician,	Jefferson City.		

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## ANNNOUCEMENT.

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Shortly following the distribution of this bulletin the personnel of the Missouri State Board of Health will, by virtue of the expiration of the terms of appointment of five members, have undergone a change.

We are therefore prompted to call the attention of the public to a few notes retrospective in character.

Until the fall of 1909 the Missouri State Board of Health was without a central office or administration offices in the State capitol. The enactment of the law requiring the immediate registration of births and deaths enabled the Board to provide permanent quarters at Jefferson City.

As soon as practical after the furnishing and equipping of these offices, the law concerning Vital Statistics was put in operation. The first returns were made to this office during March, 1910. The operation of the law has been exceedingly satisfactory to all. Missouri was admitted into the United States Registration Area after ten months operation of the law; or in other words, this State was admitted January 1, 1911.

The success that has attended the operation of this law has been due in no small measure to the careful and faithful service of Local Registrars appointed by the Board.

There are at present some 1,125 commissioned Registrars. The fears of many who were of the opinion that the Vital Statistics law could not be satisfactorily operated in Missouri have been quieted.

This State now ranks among the first in the completeness of its returns and in the thorough tabulating and compiling of statistical data. The law should continue to operate with less and less difficulty, and full returns should be received with little or no difficulty.

In May, 1910, the State Board of Health installed in the administration offices a laboratory of bacteriology. Citizens of the State, and the medical profession in particular, have availed themselves of the opportunities offered by this laboratory; that is, free examination of bacteriological and pathological specimens.



As an evidence of the growth of the work of this laboratory, it is to be mentioned that during the eight months of 1910 that the laboratory was in working operation 708 examinations were done; for the year 1911, 2,404 were done; while for the year 1912 4,146 examinations were done.

This laboratory has come to stay, and is one of the important divisions, operating under the jurisdiction of the State Board of Health. Its usefulness should continue to increase.

The State Board of Health provides the public with free mailing tubes for diphtheria specimens, and is now putting into the hands of health officers sputum containers to be used in sending specimens to the laboratory for examination.

Prior to May, 1910, the State Board of Health was without a bacteriological laboratory, but employed a bacteriologist. Because of the lack of the centralization of the operating forces of the Board, the Bacteriologist, under the old method, did comparatively few examinations.

The examining and licensing of physicians, surgeons and mid-wives has been a function of the Board since its organization.

Duties performed in this division by the State Board of Health have been augmented by the present Board, in that the system of verifying credentials and recording licenses has been made much more perfect.

The successes that have attended the efforts of the Board have been due in no small measure to the generous support given by the medical fraternity and the Board's appointees, those acting out in the State and those occupying positions in the offices. To all of these we wish to express our sincere thanks and bespeak that the same generous support be given the new Board, soon to be appointed.

FRANK B. HILLER, M. D.,  
Secretary State Board of Health.



BULLETIN OF THE

# Missouri State Board of Health

NEW SERIES

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## THE COMMON FLY.

Larvae or maggots, which finally develop into the house fly, are hatched from eggs. These eggs are deposited in masses, heat and moisture being required for their hatching. About twenty-four hours time is required after the eggs are laid until the development of the larvae. In order that the eggs may normally develop, heat and moisture are essential.

The fly lays about 120 eggs, and there may be from four to twelve or more breeds yearly. This is a matter depending upon climate and other conditions.

The entire life of the larvae is from four to eight days, when it develops into an inactive stage, known as the pupa. Some five to seven days are required from the time it reaches the resting stage until it is developed into the perfect insect.

The breeding of flies occurs in manure and decaying matter undergoing fermentation, such as old paper, straw, decaying vegetables, etc.

The breeding of flies occurs most frequently in horse manure.

The fly is a prominent factor in the dissemination of many of the infectious diseases, the most prominent of which is tuberculosis, typhoid fever, dysentery and the diarrhoeal diseases of infancy. It disseminates these diseases by conveying the infection to the solid food and fluids taken into the body.

The legs of this insect are hairy, as is likewise the body. The insect lighting upon material containing infectious germs gathers these on its legs, mouth parts and body and conveys them to articles



of food. To prevent this factor of dissemination of disease, it is required that the fly be not only destroyed, but that its breeding place be not permitted to exist.

The "Swatting of the fly" and its destruction after development is commendable, and is to be practiced to the fullest extent possible; however, the reasonable and rational course to pursue is to do away with the breeding places, which can largely be done.

Horse manure should not be allowed to stand for a longer period than from three to seven days. It should be deposited in bins containing concrete floors and walls, which are thoroughly screened.

Manure scattered upon the ground and after drying is not a ready breeding place for flies. Decaying vegetables, straw, old papers, etc., should not be allowed to accumulate upon the premises of anyone. These should be buried or otherwise destroyed.

The garbage can is a most common breeding place for flies. Receptacles for the purpose of containing garbage should be provided with a lid, and this should be constantly closed, excepting as required to be open in depositing garbage or in cleaning.

The garbage container should be emptied every two or three days and thoroughly washed out with hot water and lime or kerosene scattered in and about it. The ground upon which it sets should be frequently covered with lime or kerosene.

To prevent flies gaining access to homes, the screening of all doors and windows is essential.

It is likewise essential, in the matter of protecting food, that all this be screened in the market places. The public should demand of merchants clean food and food to which the fly has not had access.

Despite the best precautions with reference to the destruction and prevention of breeding places, despite the most perfect screening, flies will, to a certain extent, enter human habitations and continue to be a menace to health and comfort.

The following means should be used as exterminants and as means to drive them from homes:

Twenty to thirty drops of carbolic acid placed on a hot stove lid or shovel will cause extreme discomfort to flies and will largely drive them from a room. When using this shades to all windows should be drawn, the room thus being rendered semidark. Leave a single window or door open to permit the flies passing out.

One dram of bichromate of potash dissolved in two ounces of



sweetened water produces a deadly fly poison. Many of the poisonous fly papers on the market are equally effective.

One tablespoonful of formaldehyde in a pint of water produces a mixture which, if left in a room, will drive flies away.

Flies carry disease and filth from the open privy. A privy constructed along sanitary lines is one of the chief requisites of the household in rural sections and in towns and cities not having proper sewerage systems.

Human excreta coming from patients ill of typhoid fever and other infectious diseases contains the germs of these. These germs from the privy are frequently carried to the nursing bottle of infants and to the food of adults. Excreta coming from those ill of infectious diseases should always be chemically disinfected. It should then, preferably, be not deposited in the ordinary privy, but, after most thorough disinfection, should be buried, and then always at a distance of from four to five hundred feet from a well or cistern, and then on the downhill side of such containers of drinking water.

## **RABIES.**

### **RULES SUGGESTED FOR CONTROLLING.**

The State Board of Health recommends the adoption of the following rules in all communities where rabies is known to exist, or from which cases of rabies have been recently reported:

### **MUZZLING.**

Every dog in the town of —, or county of —, shall for a period of six months on and after seven days from the date of this order wear a good and substantial muzzle securely put on so as to prevent it from biting and snapping; and any dog going at large during said period without such muzzle shall be taken up by the poundmaster and impounded.

### **NOTIFICATION.**

1. Whenever the owner or person having the custody or possession of any animal shall observe or learn that such animal has shown symptoms of rabies, or has acted in a manner which would lead a reasonable man to a suspicion that it might have rabies, such owner or person having the custody or possession of such animal shall immediately notify the board of health officer, and shall allow the health officer or other official of the board of health to make an inspection or examination of such animal, and



to quarantine such animal until it shall be established to the satisfaction of said official that such animal has or has not rabies.

2. Whenever it is shown that any dog has bitten any person, the owner or person having custody or possession thereof shall upon order of the health officer quarantine it and keep it tied up or confined for a period of two weeks, and shall allow the health officer or other official of the board of health to make an inspection or examination thereof at any time during said period.

3. If it shall appear to the health officer or other official of the board of health, upon an examination as aforesaid, or otherwise, that a dog or other animal has rabies, he may kill it forthwith.

4. Whenever any animal shall be bitten by another animal having rabies the owner or person having the custody or possession of the animal so bitten shall, upon being informed thereof, either kill such animal or quarantine it and keep it tied up or confined for a period of six months, and the health officer or other official of the board of health shall have power, in his discretion, to kill or quarantine the animal so bitten, in case the owner or person having the custody or possession thereof shall fail to do so immediately, or in case the owner or person having the custody thereof is not readily accessible.

5. Any person violating any one of the provisions of this ordinance shall forfeit and pay a penalty of \$25 for each offense.

#### THE SANITARY PRIVY.

Now is the time to build that sanitary privy, and so be prepared to do your share toward abating the fly nuisance during the coming summer. A pamphlet giving full directions for building a sanitary privy will be sent free upon application to the State Board of Health.

#### OPHTHALMIA NEONATORUM.

Thirty per cent of the blindness in the United States is from this cause. In other words, almost thirty per cent of the blindness could have been prevented by employ of Crede's method. This method, viz.: The dropping of 2% (or 1%) solution of silver nitrate into the eyes of new-born babies should be carried out as a matter of strict routine in every case, whether or not a possibility of infection is suspected. Hospitals and obstetricians practically always observe this rule, and it should be adopted by every physician and midwife.



## PHYSICIANS AND SURGEONS LICENSED.

During the year 1912 licenses to practice medicine and surgery were issued to 280.

Of this number 213 were licensed upon examination and 67 upon reciprocity.

TABLE—Physicians and surgeons licensed on examination, by months.

January.....	3
February.....	..
March.....	..
April.....	2
May.....	3
June.....	12
July.....	148
August.....	..
September.....	..
October.....	7
November.....	38
December.....	..
Total.....	213

TABLE—Physicians and surgeons licensed on reciprocity, by months.

January.....	..
February.....	9
March.....	5
April.....	8
May.....	8
June.....	6
July.....	7
August.....	1
September.....	9
October.....	6
November.....	3
December.....	5
Total.....	67

TABLE—Physicians and surgeons licensed on reciprocity as shown by states.

District of Columbia.....	1
Georgia.....	1
Illinois.....	12
Indiana.....	5
Iowa.....	10
Kansas.....	8
Kentucky.....	3
Maine.....	1
Maryland.....	5
Minnesota.....	1
Michigan.....	1
Nebraska.....	5
Ohio.....	7
Texas.....	3
Virginia.....	2
West Virginia.....	2
Total.....	67



## MIDWIVES LICENSED.

During the year 1912 license to practice midwifery was issued to 11.

TABLE—Midwives licensed on examination, by months.

September.....	10
November.....	1
Total.....	11

## BACTERIOLOGICAL LABORATORY.

## EXAMINATIONS FOR THREE MONTHS.

	Tuberculosis (sputum) ..	Typhoid....	Diphtheria..	Water.....	Gonorrhoea.	Malaria....	Rabies... ..	Tuberculosis (not sputum).	Miscellaneous	
October.....	125	145	81	33	15	5	2	6	10	
November.....	101	55	75	10	8	9	.....	5	13	
December.....	119	44	75	4	12	4	1	6	10	
Totals.....	345	244	231	47	35	18	3	17	33	
Grand total...	.....	.....	.....	.....	.....	.....	.....	.....	.....	977
Tuberculosis: per cent positive.....										29.2
Typhoid: per cent positive.....										40.1
Diphtheria: per cent positive.....										47.6

## SPUTUM OUTFITS.

The laboratory is preparing for general distribution a supply of regulation sputum outfits. These will be ready about April 1st, and may be obtained by addressing "The State Bacteriologist, Jefferson City, Missouri."

## \*HOOKWORM REPORT.

Jefferson City, Mo., March 22, 1913.

Dr. Frank B. Hiller, Sec'y State Board of Health, Jefferson City, Missouri:

Dear Doctor—Following your instructions to investigate the conditions obtaining in Southeastern Missouri relative to hookworm infection among the inhabitants, I proceeded hence on March 7th

\*Ability to publish this report in the present issue of the "Bulletin" is due to the fact that a delay in printing and distribution has existed.



and spent six days in various parts of Pemiscot and Dunklin counties.

The purpose of the trip was twofold, namely, to demonstrate, if possible, a presence of hookworm disease in the part of the State visited, and to interest the physicians in the matter of hookworm, with a view to gaining more complete information at a later date.

Deering was the town selected for special investigation. This is a "Company town" of 400 inhabitants, operated by the Wisconsin Lumber Company. It is situated near the middle of the western border of Pemiscot county. The land is low, swampy and wooded, and during the flood of a year ago was covered by about two feet of water.

The general appearance and sanitary conditions of Deering, however, were found to be much better than anticipated. The houses are all provided with well-made privies of the box type, with the exception of some in the negro district. Here several privies were seen with open backs and no boxes. No privies in the town are screened. A scavenger is employed, whose duty it is to make regular collections of the night soil, to apply disinfectants, and dispose of it by hauling into the woods.

It was attempted to obtain a series of thirty or more specimens of feces for examination during this stay in the town. Of this number of specimen boxes distributed through the assistance of the company physician, Dr. D. W. Lutens, only eight were returned. Hookworm ova were found in one of these, which case showed several well-marked indications of the disease.

This case was a boy, sixteen years old, weighing seventy-five pounds, and fifty-six inches in height. The dryness of the skin was very noticeable; there was some pallor, and the mental backwardness was one of the most striking features. Though with considerable opportunity for schooling, he was still doing work in the first grade.

Blood examination showed:

Red blood corpuscles.....	4,000,000
White blood corpuscles.....	20,000
Haemoglobin (Tallqvist) .....	80%
Differential count:	
Polynuclears .....	59%
Small lymphocytes .....	29.5%
Large mononuclears .....	3.5%
Eosinophiles .....	8%



A brother five years old appeared normal, and no ova were found in his feces. It should be stated that this family had lived in Louisiana two years previously. Other members of the family would not submit to examination.

A public lecture with the attendance of about fifty was given at Deering, and considerable interest shown. It was hoped that this might result in more specimens being submitted, either to the local physician or forwarded to the laboratory.

In addition to Deering, the following towns were visited, namely, Caruthersville and Pascola in Pemiscot county, and Kennett, Hornersville and Arbyrd in Dunklin county, where also one lumber camp was visited. It was not attempted to obtain specimens for examination in these places, the object being to interest the physicians on the subject, with a view of their sending in later specimens, both from suspected cases and from any source available. Twenty-one physicians were interviewed. One reported a case confirmed by laboratory examination, which occurred in Hayti last summer. Most of the doctors were interested and would willingly assist by sending specimens.

While sanitary conditions seemed to be fair in the larger places, all the conditions favorable to the existence and spread of hookworm obtained to a greater or lesser degree in the smaller towns. The climate and the physical character of the country, which in spring is largely covered by water, together with the absence of, or poorly constructed privies, afford suitable conditions for the presence and spread of hookworm disease.

It would not be difficult to select in any of the towns visited a good number of what might be called suspicious looking cases.

An interesting point with regard to the presence of hookworm in states bordering upon Missouri, and especially that part of Missouri visited, is shown in the second annual report of the "Rockefeller Sanitary Commission for the Eradication of Hookworm Disease." Of six counties, two in Tennessee and four in Arkansas, bordering on Pemiscot and Dunklin counties, hookworm infection has been demonstrated in four; likewise those in Arkansas bordering on Barry, Stone, Ozark, Ripley and Butler counties.

Since returning to Jefferson City four specimens of feces from Pemiscot county have been examined, all being negative. Additional data will be submitted as available.

Yours very truly,

M. C. STONE, M. D.,

State Bacteriologist.



## DISINFECTION.

### DIRECTIONS FOR THE USE OF DISINFECTANTS.

*Sulphur*.—Burn not less than four pounds for every one thousand cubic feet of air space. Keep room closed for twenty-four hours. Sulphur burned in a dry air is of very slight disinfecting power. First, prepare the room by opening out clothing and bedding, pulling furniture from the walls, loosening prints and photographs on the walls, opening and suspending by their covers all books and pamphlets, pillow slips removed and hung on a line, pillows turned on end, mattresses placed in good position, closets and dressers opened and emptied, registers shut, and all cracks and openings closed with rags or pasted shut with strips of paper.

Procure a tub and fill in a few inches of water, sufficient to nearly cover four bricks placed in the center. Upon the bricks place an iron pot or pan and break the roll sulphur into it in rather small fragments. Now take a hand atomizer and spray water around the room and over most of the objects therein, pour alcohol over the sulphur and light it, see that it is well on fire and that all is safe from fire spreading to surrounding objects, and then close the door and seal it with paper from the outside. After twenty-four hours air out the room.

If the furnishings in the room are of such a nature as to be injured by spraying with water, boil a kettle of water in the room so that it is filled with steam, or pour a quantity of boiling water into a tub and allow the steam to escape into the room.

Sulphur disinfection is only fairly effective, and it must not be forgotten that metal objects and gilt frames are liable to corrosion by the fumes, and that wall paper and fabrics may be more or less bleached. Sulphur candles are effective if one uses a sufficient number of them, something very rarely done, since it takes nearly a dollar's worth to disinfect a moderate-sized room.

*Formaldehyde*.—Prepare the room as for sulphur disinfection. Be sure the air is moist, and it is well for it to be quite warm also. For each one thousand cubic feet capacity provide two pints of formaldehyde solution and thirteen ounces of potassium permanganate.

After the room is prepared, procure a tin, agate or iron pail, holding not less than eight quarts, and place it in a large dish pan, with two bricks under the pail and within the pan. This is neces-



sary because of the heat generated and the effervescence when the chemicals are mixed. In very rare instances there has been fire from the heat or ignition of the vapor, but with proper handling this should not be. It may be well to look through a window while the gas is being evolved. Allow no fire or light in the room.

Place the permanganate in the pail first, and when all is ready from a wide-mouth bottle or pitcher quickly pour the formalin upon the crystals, and quickly retreat from the room, closing the door promptly and sealing it from the outside. The sealing should include the keyhole and the opening for the knob. Do not open the room for at least eight hours. Ventilate thoroughly and then close again, with several shallow vessels, containing a little ammonia distributed through the apartment. This will soon remove the odor of formaldehyde. Then open again and allow the sun to enter if possible.

This method is the most effective one known and has very little effect upon metal ornaments and upon fabrics. Some of the claims made regarding the penetrating power of formaldehyde gas have not been justified by experience, but the agent is one of great value when properly used.

*Mercuric Chloride (Corrosive Sublimate).*—A solution of one to one thousand (sixty grains to one gallon of water) will kill pathogenic bacteria excepting anthrax in fifteen to twenty minutes. When much organic matter is present twice this strength is required. Always use a fresh solution and do not keep it in metal vessels nor pour quantities through metal pipes. In making large quantities of solution, ammonium chloride may be added to render the bichloride more soluble. The city of New Orleans designates one and one-half ounces each of bichloride and ammonium chloride to twelve and one-half gallons of water (about five bucketfuls) to make a solution for disinfecting clothing and bedding. The garments are immersed for six hours and then rinsed in clean water. The Ohio board uses the following "standard solution:"

Corrosive sublimate, four ounces.

Sulphate of copper, one pound.

Water, one gallon.

The copper salt is added principally to color the solution. For disinfecting stools add eight ounces of the stock solution to one gallon of water. One-half this strength is suitable for disinfecting clothing, towels, bed linen, etc. Immerse them in it for several hours before sending to the laundry.



Another good stock solution that keeps well has been adopted by the Iowa board. It is as follows:

Corrosive sublimate, three hundred thirty and one-half grams.

Citric acid, one hundred and fifty-six grams.

Water (soft), twenty liters.

A little coloring material.

One ounce of this solution to one pint of water makes a solution of one to one thousand. It is suitable for many purposes.

*Crude Phenol* is no longer official, but it is very cheap and is used for disinfection of stables and places where the odor is not objectionable. The Wisconsin board recommends for stable and cellar disinfection a solution made of equal parts of crude phenol and concentrated sulphuric acid.

Slowly add the sulphuric acid to the phenol contained in a vessel immersed in water. Use the mixture by diluting with water so as to make a two or three per cent solution for use upon smooth surfaces and five per cent upon the rougher places.

*Phenol U. S. P.*—A five per cent solution (phenol, eight ounces; water, five quarts) is a good general disinfecting agent and especially for sputum. For use upon the human skin do not employ solutions over two and one-half per cent.

*Chlorinated Lime.*—Use six to eight ounces to a gallon of soft water and keep in a stone jug or jar. The stronger solution may be used for receiving feces and the weaker one for other discharges. The contact of the disinfectant should not be less than half an hour and the amount of solution used at each evacuation should be at least one quart. For disinfecting bedding, clothing, dishes, etc., use one to two ounces to a gallon of water and allow them to remain in the solution for several hours.

*Fire* is a sure disinfectant to be used for things of little value.

*Steam.*—Superheated steam under pressure (240 degrees F.) will destroy all germs within ten minutes. It requires apparatus in a special building. The general practitioner will not have to do with this method, but every municipality should have a plant so arranged as to secure good pressure and with the steam chamber built into a brick wall and the two ends opening into unconnected rooms, one for infected articles and the other for disinfected ones.

*Dry Heat.*—An oven at a temperature of 230 degrees F. will disinfect articles therein after an exposure of two hours.



*Boiling* in water for thirty minutes will destroy all germs.

In a public health sense, "Complete disinfection" means disinfection during illness of the patient's body (superficially) and all of the secretions; clothing and utensils used by the patient, and after recovery, death or removal, disinfection of all apartments (and their contents) occupied by or contiguous to the patient. It should be done by the local health officials during and following dangerous infectious diseases, inclusive of tuberculosis.

By "Partial disinfection" is meant the disinfection of the discharges or excretions, the clothing of the patient and the room used by him, after his recovery. This may be done by either the attending physician or by the health officials. (Blair.)

#### DISINFECTING THE HUMAN BODY.

Before releasing a patient who has been ill of the eruptive, contagious diseases (smallpox, scarlet fever, etc.), the body must be bathed with a bichloride solution, one to four thousand. This must be followed by bathing with soap and hot water.

### IMPORTANT NOTES CONCERNING CERTAIN INFECTIOUS DISEASES.

#### CEREBROSPINAL MENINGITIS.

1. *Nature*.—An acute infection of the membranes of the brain and spinal cord caused by the meningococcus. The onset is sudden and characterized by high temperature, vomiting and headache, soon followed by convulsions and rigidity.

2. *Period of Incubation*.—Short, one week.

3. *Duration of Illness*.—When the use of antitoxine is followed by recovery, the duration is usually two to three weeks. Fatal cases die in from two or three days to two weeks.

4. *Mode of Contagion*.—Infection is carried in the secretions of the nose and throat, which are also the probable path of entrance into the body.

5. *Period of Contagion*.—Throughout the course of the disease, and also by carriers.

6. *Rules*:

A. *Quarantine*.—Quarantine should be strict with regard to the patient and attendants. Children of the household should



remain away from school, and all members should avoid public gatherings.

B. *Isolation*.—This should be strict, special care being used about the utensils, linen, etc., used by the patient, and in the washing of the hands by the attendants.

C. *Care of Family*.—The use of a mild mouth wash and nasal spray is advisable. Special attention should be paid to any members of the family showing catarrhal or other symptoms not suggestive of disinfection.

D. *Release*:

1. *Patient*.—It is of the utmost importance that the respiratory mucous membranes be in a normal condition. Greater or lesser degrees of paralysis may be disregarded.

2. *Articles Used by the Patient*.—These, as far as possible, should be destroyed by burning. Dishes, etc., should be sterilized by boiling.

3. *Clothing, Bedding, Etc.*—This may be disinfected by boiling; or better, first soaked in 5% phenol solution or bichloride 1 to 1000 before boiling.

4. *Premises*.—The room should be totally sealed and fumigated by formaldehyde. (See article in this bulletin on disinfection.)

#### INFANTILE PARALYSIS.

1. *Nature*.—An acute infection by an unknown micro-organism, which attacks chiefly the motor cells of the spinal cord, resulting in more or less extensive paralysis of the extremities. Children are attacked more frequently than adults. The onset is sudden, and the paralysis, which is of the flaccid type, is one of the chief symptoms.

2. *Period of Incubation*.—This is not definitely known, probably a few days.

3. *Duration of Illness*.—Recovery usually begins in a week to ten days after the onset. The paralysis may entirely disappear or remain in all degrees.

4. *Mode of Contagion*.—Probably disseminated by the secretions of the respiratory mucous membranes. Possibly transmitted by bites of insects.



5. *Period of Contagion*.—Not known.

6. *Rules*.—Rules under meningitis apply to cases of infantile paralysis.

#### DIPHTHERIA.

1. *Nature*.—An acute localized infection of the tissues of the pharynx, and frequently of the nose, larynx and trachea. The disease, including membranous croup, is caused by the diphtheria bacillus. Its growth is always localized in the tissue; septicæmia never occurs. The infection is characterized by the formation of a false membrane. The toxemia is usually severe, and affects chiefly the heart.

2. *Period of Incubation*.—Usually short, two to four days.

3. *Duration of Illness*.—The acute symptoms rapidly subside when antitoxine is used, especially if used early. The prostration, however, usually lasts two weeks or more.

4. *Mode of Contagion*.—The secretions of the nose and throat carry the infection.

5. *Period of Contagion*.—This depends upon the length of time that virulent bacilli remain in the nose and throat, and can be determined only by cultures. Bacilli usually disappear in from two to four weeks after the beginning of the disease. Occasionally they remain for a much longer period, so that cases that have otherwise completely recovered become carriers.

#### 6. *Rules*:

A. *Quarantine*.—Quarantine should be strict in regard to the patient and attendants. Other children in the household, unless complete isolation be possible, should receive immunizing doses of antitoxine. Children should not attend school or associate with other children.

B. *Isolation*.—See meningitis.

C. *Care of Family*.—A mouth wash and nasal spray may be used. Members complaining of sore throat should have cultures taken for diagnosis.

#### D. *Release*:

1. *Patient*.—This should depend altogether upon the presence or absence of diphtheria bacilli in the nose and throat as shown by cultures, and it is recommended that two successive negative cultures be obtained before release. The first may be taken one week



after the throat is clear of membrane. It is also recommended that cultures for release be taken from both nose and throat.

2. The articles used by the patient; the bedding, clothing, etc., and the premises should be treated as indicated under "Release" in meningitis.

#### TYPHOID FEVER.

1. *Nature.*—Infection of the typhoid bacillus is characterized chiefly by a fever continuing four weeks or longer, marked prostration, loss of weight, delirium and diarrhoea. Infection is through the alimentary canal, but the disease becomes a true septicæmia.

2. *Period of Incubation.*—Two weeks.

3. *Duration of Illness.*—Four to six weeks. Relapses common.

4. *Mode of Contagion.*—This always occurs through the mouth, from contaminated food, drink, or fingers, which have directly or indirectly received the infection from the discharges of another patient. Sewage pollution is especially common, as during the disease the bacilli are present in both urine and feces. Flies.

5. *Period of Contagion.*—During the fever, and for a varying period of time afterward. A few cases become carriers, and may remain so for a long time.

6. *Rules:*

A. *Isolation.*—Special care should be used with regard to the attendants both in the handling of the patient and the disinfection of the discharges, and in turn their contact with the rest of the household; this with reference to the possibility of food and drink contamination.

B. *Care of Family.*—No especial rule other than mentioned above applies here. The antityphoid vaccination is applicable in this connection. The precaution, however, should be taken of making sure that persons so vaccinated are well and free of fever at the time.

#### TUBERCULOSIS.

1. *Nature.*—An infection by the tubercle bacillus, more or less chronic in nature, affecting chiefly the lungs, and it is to some degree contagious. Its contagiousness depends upon the care which the patient takes in preventing the discharges from the disease and



tissues (sputum) from becoming disseminated. Consequently it is dangerous only while there are open lesions, which can throw off the bacilli.

## 2. *Rules:*

A. *Isolation.*—This applies in that the patient should sleep alone, and should use his own drinking and eating utensils. The destruction of the sputum, preferably by burning, is of the utmost importance.

B. *Care of Family.*—The proper care of the patient solves the question of the care of the family. Any symptoms the least suggestive of tuberculosis in a member of the family should, however, receive prompt attention.

C. *Treatment of Premises After Death or Removal of Patient.* Thorough cleaning and formaldehyde disinfection of the room, bedding, clothing, etc., should be carried out.

## SMALLPOX.

1. *Nature.*—One of the most infectious diseases. The indefinite symptoms during the first two or three days of the fever lead to frequent mistakes, and especial care should be taken during an epidemic. Headache, backache and sore throat, accompanied by fever, are suspicious symptoms, especially if there has been exposure. The eruption, which appears on the third or fourth day, is first macular, but passes through the papular and later on vesicular and pustular stages. The induration of the lesion itself is characteristic, as well as its general distribution, including palms and face.

2. *Period of Incubation.*—Ten to fourteen days.

3. *Duration of Illness.*—Acute symptoms usually last ten to fourteen days, but desquamation is not complete for three or four weeks.

4. *Mode of Contagion.*—From the secretions and skin.

5. *Period of Contagion.*—Especially contagious in the early part of the disease, and throughout the illness.

## 6. *Rules:*

A. *Quarantine.*—Strict quarantine of the entire household should be enforced.

B. *Isolation.*—This should be as complete as possible.



C. *Care of Family*.—All members of the family should be vaccinated at once, even if successful vaccination has been done previously.

D. *Release*.—After desquamation the bichloride bath should be given, together with a complete change of clothing. Articles used by the patient should be burned or sterilized by boiling, as far as possible. Clothing, etc., should be fumigated, together with the room. (See article on "Disinfection.")

#### SCARLET FEVER.

1. *Nature*.—An acute eruptive fever, characterized by a peculiar bright red rash, beginning on the upper chest, and rapidly spreading over the face, body and extremities. The initial fever is high, and is usually accompanied by vomiting. The disease is contagious and sequellae are common; otitis media, nephritis and adenitis.

2. *Period of Incubation*.—Short, four days.

3. *Duration of Illness*.—Acute symptoms last from one to two weeks. Complications and sequellae may prolong the illness to one or two months.

4. *Mode of Contagion*.—Secretions of the nose and throat. Probably, to some degree, the scales of desquamated skin and the suppurating lesions.

5. *Period of Contagion*.—From the first symptoms until patient has desquamated, and until all complicating open lesions have healed.

6. *Rules*:

A. *Quarantine*.—Quarantine should be extended to patient, attendants and children of the household.

B. *Isolation*.—This should be strict.

C. *Care of Family*.—This is covered by proper isolation of the patient, except that children should be under close observation.

D. *Release*:

1. *Patient*.—Bichloride bath and clean clothes, with proper precaution in regard to contamination of articles that have been used by the patient, is all that is required.

2. *Articles Used by the Patient*.—Clothing and premises should be disinfected as under meningitis.



**Births and Deaths Reported in Missouri (Stillbirths Not Included) During the Quarter Ending December 31, 1912.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Adair—</b>	22,700																											
October.....		25	17	1						1			3				1	3		1						2		5
November.....		49	22	2													2	1										6
December.....		40	18	2					2					1	1		2	2		1						1		5
Totals.....		114	57																									
<b>Andrew—</b>	15,282																											
October.....		24	7										3				1	1										2
November.....		23	13										1				2	3		1								2
December.....		27	14										4				1	1		1								3
Totals.....		74	34																									
<b>Atchinson—</b>	13,604																											
October.....		19	5						1								1	1		1								
November.....		28	9	1													2				1							2
December.....		27	8	1			1											1	3						1			1
Totals.....		74	22																									
<b>Audrain—</b>	21,687																											
October.....		39	17	1									2				2	3		1		1	1	1				1
November.....		27	8															1										1
December.....		40	17						1		1		1					5	2	1								5
Totals.....		106	42																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright's Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>St. Joseph—</b>	77,403																											
October.....		127	99	1							14	1	5	2			11	18	7	1	4	5	3	6	1	1	19	
November.....		111	75								3		6				5	14	7		1				2		27	
December.....		116	95							1	5	1	9	4			10	10	9	2	2		3	1			20	
Totals.....		354	269																									
<b>Butler—</b>	20,624																											
October.....		46	52	2			1				2				1			3	5	1	7	1	3	2			25	
November.....		53	48	4							3	1		1	2		1	1	10		5	3	2	2			13	
December.....		43	52	3					1		7						3	3	12	1	1	2					15	
Totals.....		142	152																									
<b>Caldwell—</b>	14,605																											
October.....		26	10								1							1				3					5	
November.....		22	11														4	2			1		1	2			1	
December.....		26	10					1			3						1	2		1							2	
Totals.....		74	31																									
<b>Callaway—</b>	24,400																											
October.....		60	25	1							1	1	1				1	5	3		2	3				1	6	
November.....		42	34	2							3	2	3				5	4				4			1		6	
December.....		39	23	1						3	3						1	4	2	1				1			5	
Totals.....		141	82																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Christian—</b>	15,832																											
October.....		33	8	1							1										1							4
November.....		35	10	1							1										1							5
December.....		36	11	1				1			1	1										1						3
Totals.....		104	29																									
<b>Clark—</b>	12,811																											
October.....		16	11							1		1		1						1		2						3
November.....		15	8										1				1	5			1							
December.....		20	16					1				1				1	4	1				1						5
Totals.....		51	35																									
<b>Clay—</b>	20,302																											
October.....		33	31	1							2	1	3	1				1	6	1		1	4	1				8
November.....		29	26								2		2	1				5	3	2			6					3
December.....		34	32								2		2	1				4	5									7
Totals.....		96	89																									
<b>Clinton—</b>	15,297																											
October.....		29	11								1						2				1	1	1					4
November.....		31	13								1	1		2				3	2		1	1	1					1
December.....		26	14								1							5	2		1		1					3
Totals.....		86	38																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the Lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>DeKalb—</b>	12,531																											
October.....		24	14								2						3	1			1	1					5	
November.....		23	8														1	1		2							2	
December.....		24	5	1													1	3	1		1							
Totals.....		71	27																									
<b>Dent—</b>	13,245																											
October.....		22	4						1											1							1	
November.....		13	6				1										2		1								1	
December.....		38	7						1		2		1								1						1	
Totals.....		73	17																									
<b>Douglas—</b>	16,664																											
October.....		34	8	1							1									1	1						2	
November.....		32	9	1							1									1	1						1	
December.....		46	9								1						1	2	2								3	
Totals.....		112	26																									
<b>Dunklin—</b>	30,328																											
October.....		129	74	2						4		2			1		4	1	18	4	8					2	23	
November.....		101	60	2						5	7		3				2	9		4	2	1					22	
December.....		114	58	2						2	2				2		2	1	13	2	4						24	
Totals.....		344	192																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup...	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Bright Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Henry—</b>	27,242																											
October.....		53	23	1							1						4	6	1	1	1	1	1	1			6	
November.....		44	21	2					1								3	3	1	1	1	1	1	1			4	
December.....		47	25	1					2				3	2			3	3	1	1	1	1	1	1			6	
Totals.....		144	69																									
<b>Hickory—</b>	8,741																											
October.....		16	5	1							1								1								1	
November.....		11	3										1														2	
December.....		18	5																1								3	
Totals.....		45	13																									
<b>Holt—</b>	14,539																											
October.....		38	14	2				1			1							3				1					5	
November.....		26	9	1				1			1							1			1						2	
December.....		33	7	1							2	1				1				1							1	
Totals.....		97	30																									
<b>Howard—</b>	15,653																											
October.....		20	11	1							2						4	1	1			1					1	
November.....		13	5	1														2									2	
December.....		19	9								1							4	4			3					1	
Totals.....		52	25																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total b i r t h s during the quarter.....	Total d e a t h s during the quarter.....	Important causes of death.																									
				Typhoid Fever.....	Smallpox .....	Measles .....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 yrs. of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....		
<b>Jefferson—</b>	27,878																												
October.....		59	13	1											1		1	1			1				3		1		2
November.....		72	27	2			1				3						1	1	3	2	1				1			9	
December.....		53	33	2													3	4								2		6	
Totals.....		184	73																										
<b>Johnson—</b>	26,297																												
October.....		43	20								1		1					4	3			2		1	1			7	
November.....		35	15								3	1						4	2				1	1				4	
December.....		58	23	1							2		4				3	3	1	1				3	1			3	
Totals.....		136	58																										
<b>Knox—</b>	12,403																												
October.....		19	5								1						2											2	
November.....		19	9	1							1						1					1	1					3	
December.....		25	5								1						1		1									2	
Totals.....		63	19																										
<b>Laclede—</b>	17,363																												
October.....		44	12						2								1	1			1					1		5	
November.....		37	7						1				1									1	1					2	
December.....		23	10						1		1						1		1									4	
Totals.....		104	29																										







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																							
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.....	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system.....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).....	Acute Nephritis and Bright's Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....
<b>Macon—</b>	30,868																										
October.....		54	26								1	1				3	3	2		2	1						10
November.....		44	25						1		2						5	1			3						4
December.....		63	18	1						1	3	2					3	3	1			1					4
Totals.....		161	69																								
<b>Madison—</b>	11,273																										
October.....		23	23	2				2			4		1				2	2			1	1					7
November.....		22	7					1	1		1						2										2
December.....		30	4														1			1							
Totals.....		75	34																								
<b>Maries—</b>	10,088																										
October.....		20	6								1							1									4
November.....		19	5	1															1		1						2
December.....		18	7									1					1	1			1						3
Totals.....		57	18																								
<b>Marion (outside of Hannibal)—</b>	12,231																										
October.....		13	10	1													1	2		2	2		1				1
November.....		21	8						1												1						2
December.....		12	9								1		2				1	1	1	1							1
Totals.....		46	27																								







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total b i r t h s during the quarter.....	Total d e a t h s during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup.	Influenza.....	Tuberculosis of the lungs.....	Other forms of tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system...	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system....	Diarrhoea and Enteritis (under 2 yrs. of age)	Acute Nephritis and Bright's Disease.....	The puerperal state...	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Morgan—</b>	12,863																											
October.....		29	10	1						1	1							1	1	2	1	1	1					1
November.....		34	9	1				1						1						1	1	1						
December.....		27	12	1						1								4										
Totals.....		90	31																									
<b>New Madrid—</b>	19,488																											
October.....		59	33	1				1	2			1	1					3	3	3	1	1	1					14
November.....		74	20	1							3							2	2	2	2	2	2					9
December.....		67	66	2				2	1	1	10	2	1				2	3	9	5	5	3	3					15
Totals.....		200	119																									
<b>Newton—</b>	27,136																											
October.....		70	23						2				1				1	3		1	5		1					7
November.....		50	18					1					1								3	1	1					6
December.....		58	19	1					2		1						1		4		1							7
Totals.....		178	60																									
<b>Nodaway—</b>	28,833																											
October.....		46	15								3						2	3	1	1	2							1
November.....		64	23								2		1	1			2	4		1	1	3						4
December.....		67	22					1			2		3				3		4	4	2	2						6
Totals.....		177	60																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age)	Acute Nephritis and Brights Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Phelps—</b>	15,796																											
October.....		37	15														1	4			1	2					5	
November.....		24	10														1	2			1	1					2	
December.....		25	9							1							1	3	1					1			2	
Totals.....		86	34																									
<b>Pike—</b>	22,556																											
October.....		39	19									2						1	2			3		1			8	
November.....		24	24	2				1				1	1				3	2	1								9	
December.....		39	17															4	2			4		1			2	
Totals.....		102	60																									
<b>Platte—</b>	14,429																											
October.....		31	18	1								2					3	1	1		1			1	1		6	
November.....		18	10							1							3	3	1		1						2	
December.....		41	18									3															5	
Totals.....		90	46																									
<b>Polk—</b>	21,561																											
October.....		37	17						1			2						2	3		1	2					4	
November.....		44	23							1		1						5			1						6	
December.....		30	17	1						3		1	1				1	2	2	3				1			5	
Totals.....		111	57																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER  
31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Ripley—</b>	13,099																											
October.....		16	7																									6
November.....		15	7	1																								4
December.....		38	13																									5
Totals.....		69	27																									
<b>St. Charles—</b>	24,695																											
October.....		57	27				2				2		1		1						2							7
November.....		41	17																									8
December.....		45	16																									4
Totals.....		143	60																									
<b>St. Clair—</b>	16,412																											
October.....		26	12	2							1																	3
November.....		33	13																									4
December.....		28	17	1							2																	3
Totals.....		87	42																									
<b>St. Francois—</b>	35,738																											
October.....		72	34					1	1	2	2		1								6							7
November.....		82	29							1	4		2															10
December.....		96	38								1																	12
Totals.....		250	101																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age).	Acute Nephritis and Brights Disease.....	The puerperal state.....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Shelby—</b>	14,864																	1				1						6
October.....		34	8														1											4
November.....		30	11	1						1								1										3
December.....		25	10								1						2	1										
Totals.....		89	29									1																
<b>toddard—</b>	27,807																											
October.....		88	56	3				5	3		2		3				3	2	1		4				2			27
November.....		80	36	3					2	2	3				1		1	2	2	1	1							14
December.....		75	47	4				2		1	2		1			1		2	2	1	1				2			17
Totals.....		243	139																									
<b>Stone—</b>	11,559																											
October.....		19	2									1																1
November.....		17	8																									3
December.....		23	2							3								1		1								
Totals.....		59	12																									
<b>Sullivan—</b>	18,598																											
October.....		52	17	1							2			1			1	5			2				1			4
November.....		36	4	1																		2						
December.....		47	10	1			1				2							2							1			3
Totals.....		135	31																									







**BIRTHS AND DEATHS REPORTED IN MISSOURI (STILLBIRTHS NOT INCLUDED) DURING THE QUARTER ENDING DECEMBER 31, 1912—Continued.**

Counties.	Population, 1910.....	Total births during the quarter.....	Total deaths during the quarter.....	Important causes of death.																								
				Typhoid Fever.....	Smallpox.....	Measles.....	Scarlet Fever.....	Whooping Cough.....	Diphtheria and Croup..	Influenza.....	Tuberculosis of the lungs.....	Other forms of Tuberculosis.....	Cancer.....	Diabetes.....	Epidemic Cerebrospinal Meningitis.....	Acute Anterior Poliomyelitis.....	Other diseases of the nervous system.....	Diseases of heart and circulatory system....	Pneumonia, Bronchopneumonia.....	Other diseases of respiratory system.....	Diarrhoea and Enteritis (under 2 years of age),	Acute Nephritis and Brights Disease.....	The puerperal state....	Accidents.....	Suicides.....	Homicides.....	Other causes.....	
<b>Worth—</b>	8,007																											
October.....		26	5									1					1			1								2
November.....		17	3														1				1							3
December.....		9	6														1	1	1									
Totals.....		52	16																									
<b>Wright—</b>	18,315																											
October.....		29	14	1					1		1		3					3	1		2							5
November.....		40	16								2																	5
December.....		70	18						3		2	1		1		1	1	2	1	1				2				4
Totals.....		139	48																									
<b>St. Louis city.....</b>	687,029																											
October.....		1,343	813	12		1	2	2	21	1	68	9	65	13		1	42	135	63	31	31	77	6	51	21	8	153	
November.....		1,274	779	7		4	4	1	18	1	54	11	53	5			30	164	78	29	10	79	4	45	19	9	152	
December.....		1,233	1,096	3		9	3	1	24	13	81	8	71	12	2		53	175	183	60	21	95	7	55	23	9	188	
Totals.....		3,850	2,688																									
Totals for October..		6,615	3,332	108		1	9	31	86	6	308	45	178	33	5	9	201	425	206	89	176	235	44	177	52	27	881	
Totals for November..		6,055	3,060	108		5	15	27	91	10	266	44	169	37	13	3	167	428	242	81	92	237	48	159	53	18	747	
Totals for December		6,426	3,781	70	1	11	16	25	90	41	323	47	205	35	20	5	235	497	483	127	69	273	40	214	59	27	868	
Grand totals.....		19,096	10,173	286	1	17	40	83	267	57	897	136	552	105	38	17	603	1350	931	297	337	745	132	550	164	72	2496	